

JVC

SERVICE MANUAL

COLOUR TELEVISION

AV-29QT4SU/D

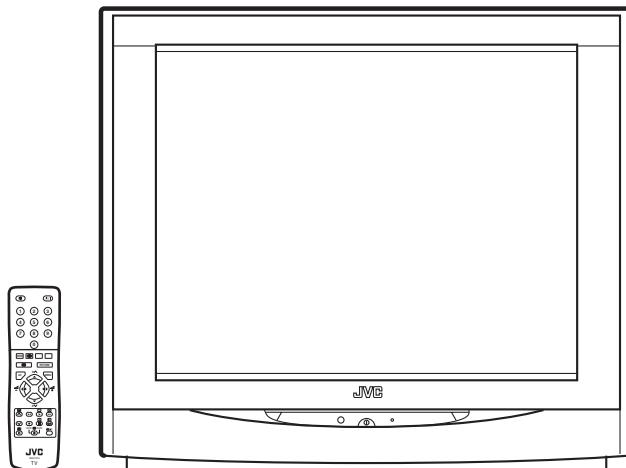


TABLE OF CONTENTS

1	PRECAUTION.....	1-3
2	SPECIFIC SERVICE INSTRUCTIONS.....	1-3
3	DISASSEMBLY	1-4
4	ADJUSTMENT	1-8
5	TROUBLESHOOTING	1-17

SPECIFICATION

Item		Content
Dimensions (W × H × D)		78.5cm × 61.5cm × 50cm
Mass		41.1kg
TV RF System		B/G, D/K, I, L/L'
Colour System	TV Mode	PAL / SECAM
	Video Mode	PAL / SECAM / NTSC 3.58 / NTSC 4.43
Sound System		A2 (B/G, D/K), NICAM (B/G, D/K, I, L/L')
Teletext System		Fastext / TOP
Tuning System		Frequency synthesizer tuning system
Receiving Frequency	VHF(VL)	46.25MHz - 168.25MHz
	VHF(VH)	175.25MHz - 463.25MHz
	UHF	471.25MHz - 863.25MHz
	CATV	S01 - S41
Intermediate Frequency	VIF	38.9MHz (B/G, D/K, L) / 33.9MHz (L')
	SIF	33.4MHz (5.5MHz:B/G) / 32.9MHz (6.0MHz:I) / 32.4MHz (6.5MHz:D/K, L) / 40.4MHz (6.5MHz:L')
Colour Sub Carrier Frequency	PAL	4.43MHz
	SECAM	4.40625MHz / 4.43MHz
	NTSC	3.58MHz / 4.43MHz
Power Input		AC220V - AC240V, 50Hz
Power Consumption		130W (Max) / 3W (Standby)
Aerial Input Terminal		75Ω unbalanced, coaxial
Picture Tube Size		Visible size : 68cm (29"), Measured diagonally (H: 54.1cm × V: 40.6cm)
High Voltage		30.0kV (at zero beam current)
Speaker		5.7cm × 12.6cm, Oval type × 2 / 5.1cm Round type (tweeter) × 2
Audio Output		10W + 10W (THD10%)
EXT-1 Input / Output		21-pin Euro connector (SCRAT socket) × 1
EXT-2 Input / Output		21-pin Euro connector (SCRAT socket) × 1
EXT-3 Input	Video	1V(p-p) 75Ω, RCA pin jack × 1
	Audio (L/R)	500mV(rms) (-4dBs), High Impedance, RCA pin jack × 2
Headphone jack		Stereo mini jack 3.5mm
Remote Control Unit		RM-C1512 (AA/R06 dry battery × 2)

Design & specifications are subject to change without notice.

SECTION 1 PRECAUTION

Please refer to "AV-29QT4SU/A (No.YA085)" about this section.

SECTION 2 SPECIFIC SERVICE INSTRUCTIONS

Please refer to "AV-29QT4SU/A (No.YA085)" about this section except a written item.

2.1 Supplementary

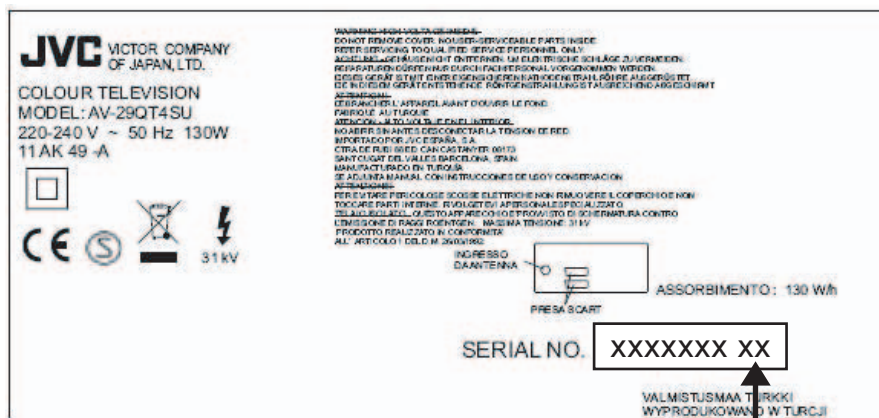
AV-29QT4SU/D is the models whose picture tube and some PWB were changed based on AV-29QT4SU/A.

Therefore, this service manual describes only the items which differ from those of the AV-29QT4SU/A service manual.

For details other than those described in this manual, please refer to the AV-29QT4SU/A service manual(No.YA085, 2005/2).

2.2 HOW TO IDENTIFY NEW MODELS

"Distinguish name" is added at the bottom of the Rating label.



DISTRIBUTE NAME
DF

2.3 DIFFERENCE LIST

SPECIFICATION

Item	Content	
	AV-29QT4SU/A	AV-29QT4SU/D
Mass	41.7kg	41.1kg
High Voltage	31.2kV	30.0kV

USING P.W.BOARD

P.W.B ASS'Y Name	AV-29QT4SU/A	AV-29QT4SU/D	DESCRIPTION
MAIN P.W.B	VE-20161071	VE-20265029	
CRT SOCKET P.W.B	VE-20173278	VE-20247134	
AV & HEADPHONE P.W.B	VE-20166292	VE-20226778	
POWER SWITCH P.W.B	VE-20160993	VE-20209386	

SECTION 3

DISASSEMBLY

3.1 DISASSEMBLY PROCEDURE

3.1.1 REMOVING THE REAR COVER

- (1) Unplug the power cord.
- (2) Remove the 8 screws **[A]**.
- (3) Remove the 4 screw **[B]**.
- (4) Withdraw the REAR COVER toward you.

3.1.2 REMOVING THE BACK DOOR

- Remove the REAR COVER.
 - (1) Remove the 2 screws **[C]**.
 - (2) Withdraw the BACK DOOR toward you.

3.1.3 REMOVING THE CHASSIS

- Remove the REAR COVER.
 - (1) Slightly raise the both sides of the CHASSIS FRAME by hand.
 - (2) Withdraw the CHASSIS FRAME backward.
(If necessary, take off the wire clamp, connectors etc.)

3.1.4 REMOVING THE MAIN PWB

- Remove the REAR COVER.
- Remove the BACK DOOR.
- Remove the CHASSIS.
 - (1) Remove the 6 screws **[D]**.
 - (2) Remove the MAIN PWB.

[CAUTION]

If necessary, take off the wire clamp, connectors etc.
Be careful enough when developing the MAIN PWB.

3.1.5 REMOVING THE SIDE CONTROL PWB

- Remove the REAR COVER.
 - (1) Remove the 2 screws **[E]**.
 - (2) Remove the SIDE CONTROL PWB.

3.1.6 REMOVING THE AV & HEADPHONE PWB

- Remove the REAR COVER.
 - (1) Remove the 1 screws **[F]**.
 - (2) Remove the AV & HEADPHONE PWB.

3.1.7 REMOVING THE POWER SW PWB

- Remove the REAR COVER.
- Remove the CHASSIS.
 - (1) Remove the 2 screws **[G]**.
 - (2) Remove the POWER SW PWB.

3.1.8 REMOVING THE LED PWB

- Remove the REAR COVER.
- Remove the CHASSIS.
- Remove the POWER SW PWB.
 - (1) Remove the 2 screws **[H]**.
 - (2) Remove the LED PWB.

3.1.9 REMOVING THE MAIN SPEAKER & TWEETER

- Remove the REAR COVER.
- Remove the CHASSIS.
 - (1) Remove the 4 screws **[J]**.
 - (2) Remove the MAIN SPEAKER.
 - (3) Remove the 2 screws **[K]**.
 - (4) Remove the TWEETER.
 - (5) Remove the opposite side similarly.

3.1.10 CHECKING THE PW BOARD

- To check the back side of the PW Board.
 - (1) Pull out the PW Board. (Refer to REMOVING THE MAIN PWB).
 - (2) Erect the PW Board vertically so that you can easily check the back side of the PWB.

[CAUTION]

- When erecting the PW Board, be careful so that there will be no contacting with other PW Board.
- Before turning on power, make sure that the wire connector is properly connected.
- When conducting a check with power supplied, be sure to confirm that the CRT EARTH WIRE (BRAIDED ASS'Y) is connected to the CRT SOCKET PWB.

3.1.11 WIRE CLAMPING AND CABLE TYING

- (1) Be sure to clamp the wire.
- (2) Never remove the cable tie used for tying the wires together.
Should it be inadvertently removed, be sure to tie the wires with a new cable tie.

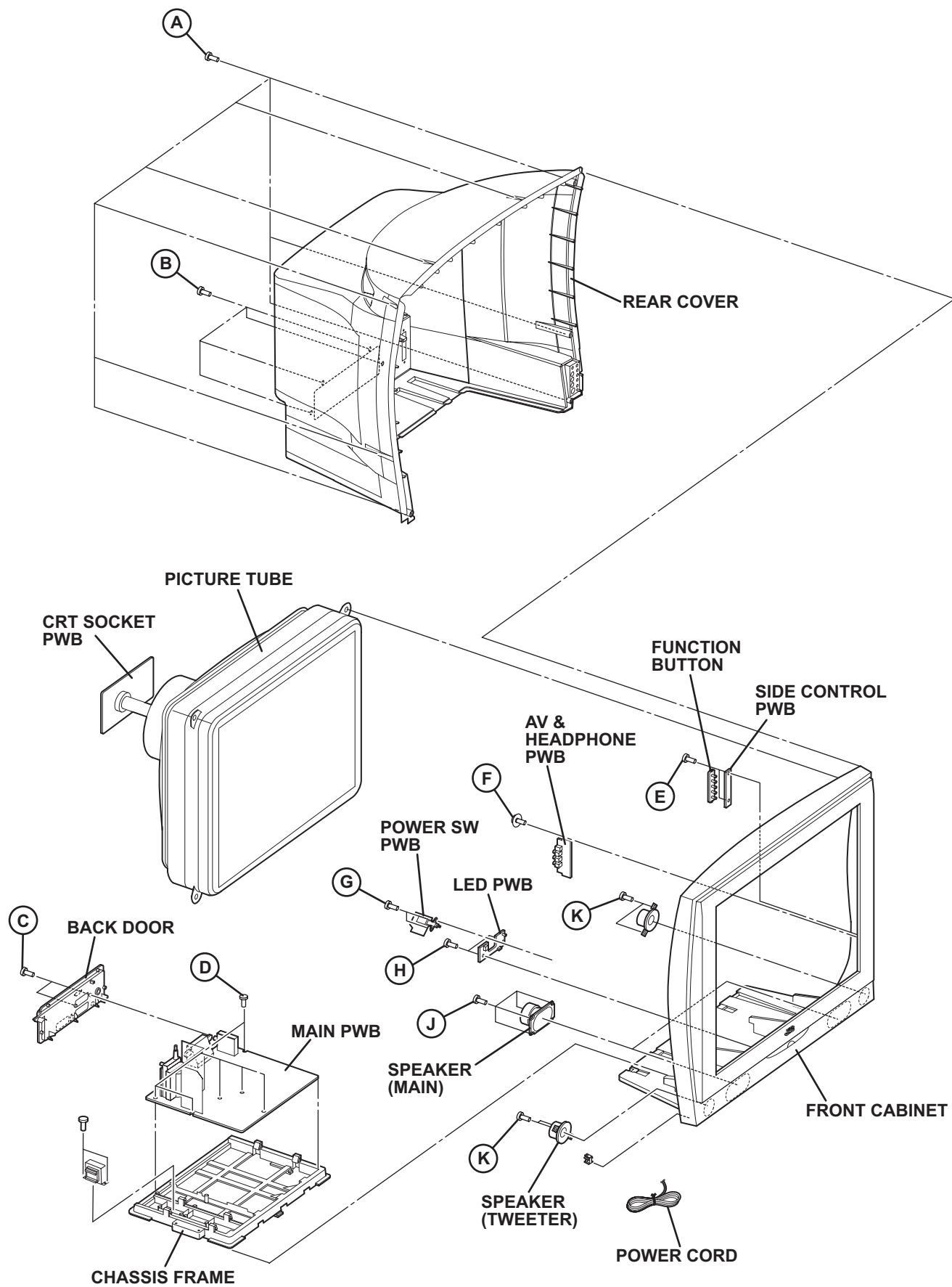


Fig.1

3.2 REPLACEMENT OF MEMORY IC

3.2.1 MEMORY IC

This model use a memory IC. This memory IC stores data for proper operation of the video and deflection circuits. When replacing, be sure to use an IC containing this (initial value) data.

3.2.2 PROCEDURE FOR REPLACING MEMORY IC

PROCEDURE

1. Power off

Switch the power off and unplug the power cord from the outlet.

2. Replace IC.

Be sure to use memory IC written with the initial data values.

3. Power on

Plug the power cord into the outlet and switch the power on.

4. SERVICE MENU setting

- (1) Press [MUTING] key and [INFORMATION] key at the simultaneously.
- (2) The SERVICE MENU screen of Fig. 1 will be displayed.
- (3) Verify what to set in the SERVICE MENU, and set whatever is necessary. Refer to the SERVICE ADJUSTMENT for setting.
- (4) Press the [MENU] key to exit SERVICE MENU.

5. Receive channel setting

Refer to the OPERATING INSTRUCTIONS (USER'S GUIDE) and set the receive channels (Channels Preset) as described.

6. User settings

Check the user setting items according to after page. Where these do not agree, refer to the OPERATING INSTRUCTIONS (USER'S GUIDE) and set the items as described.

AK49-0.0.104-JVC-GRA		
224	SAVEFS	000
225	LOADFS	000
226	DCXO	079
227	DCXOA	OFF
001	FAPS	OFF
002	ISPM	OFF
003	INIT	OFF
005	AGCSPD	001
006	AGCTO	033

SERVICE MODE SCREEN

Fig.1

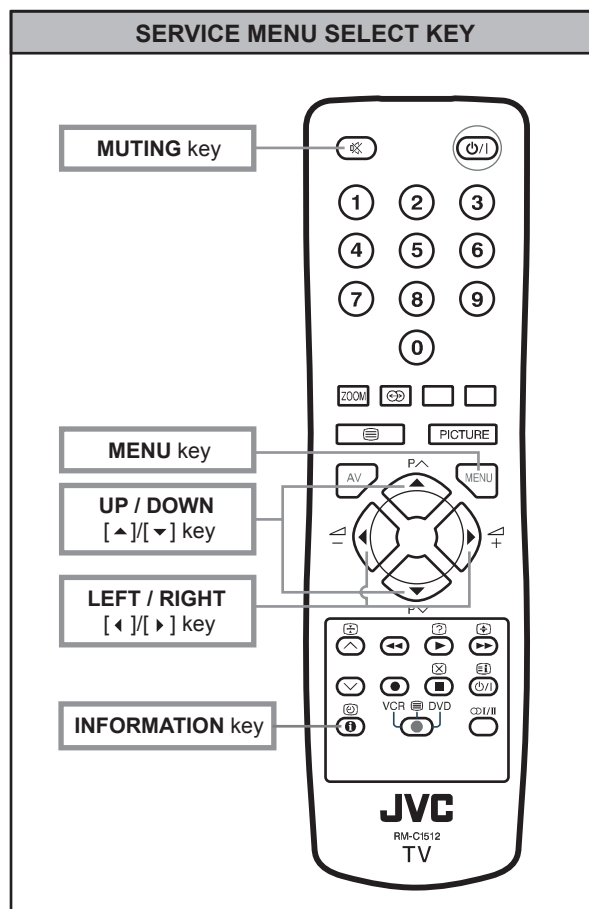


Fig.2

3.2.3 SETTINGS OF FACTORY SHIPMENT

3.2.3.1 BUTTON OPERATION

Setting item	Setting position
POWER	Off
CHANNEL	PR1

3.2.3.2 REMOTE CONTROL DIRECT OPERATION

Setting item	Setting position
CHANNEL	PR1
ZOOM	AUTO
Hyper Sound	OFF

3.2.3.3 REMOTE CONTROL MENU OPERATION

(1) PICTURE

Setting item	Setting position
PICTURE MODE	BRIGHT
COLOUR TEMP	COOL
VNR	AUTO
VCR MODE	OFF

(2) SOUND

Setting item	Setting position
BALANCE	CENTRE
SOUND MODE	STEREO

(3) FEATURE

Setting item	Setting position
SLEEP TIMER	OFF
CHILD LOCK	OFF
LANGUAGE	ENGLISH
EXT-2 OUTPUT	TV
BLUE BACK	ON

(4) INSTALLATION

Setting item	Setting position
COLOUR SYSTEM	AUTO
DECODER (EXT2)	ON
FINE TUNING	CENTRE

SECTION 4 ADJUSTMENT

4.1 ADJUSTMENT PREPARATION

- (1) You can make the necessary adjustments for this unit with either the Remote Control Unit or with the adjustment tools and parts as given below.
- (2) Adjustment with the Remote Control Unit is made on the basis of the initial setting values, however, the new setting values which set the screen to its optimum condition may differ from the initial settings.
- (3) Make sure that AC power is turned on correctly.
- (4) Turn on the power for set and test equipment before use, and start the adjustment procedures after waiting at least 30 minutes.
- (5) Unless otherwise specified, prepare the most suitable reception or input signal for adjustment.
- (6) Never touch any adjustment parts which are not specified in the list for this adjustment - variable resistors, transformers, condensers, etc.
- (7) Presetting before adjustment.
Unless otherwise specified in the adjustment instructions, preset the following functions with the remote control unit:

Setting item	Setting value
BRIGHTNESS	CENTRE
CONTRAST	
COLOUR	
SHARPNESS	
COLOUR TEMP	NORMAL
ZOOM	AUTO

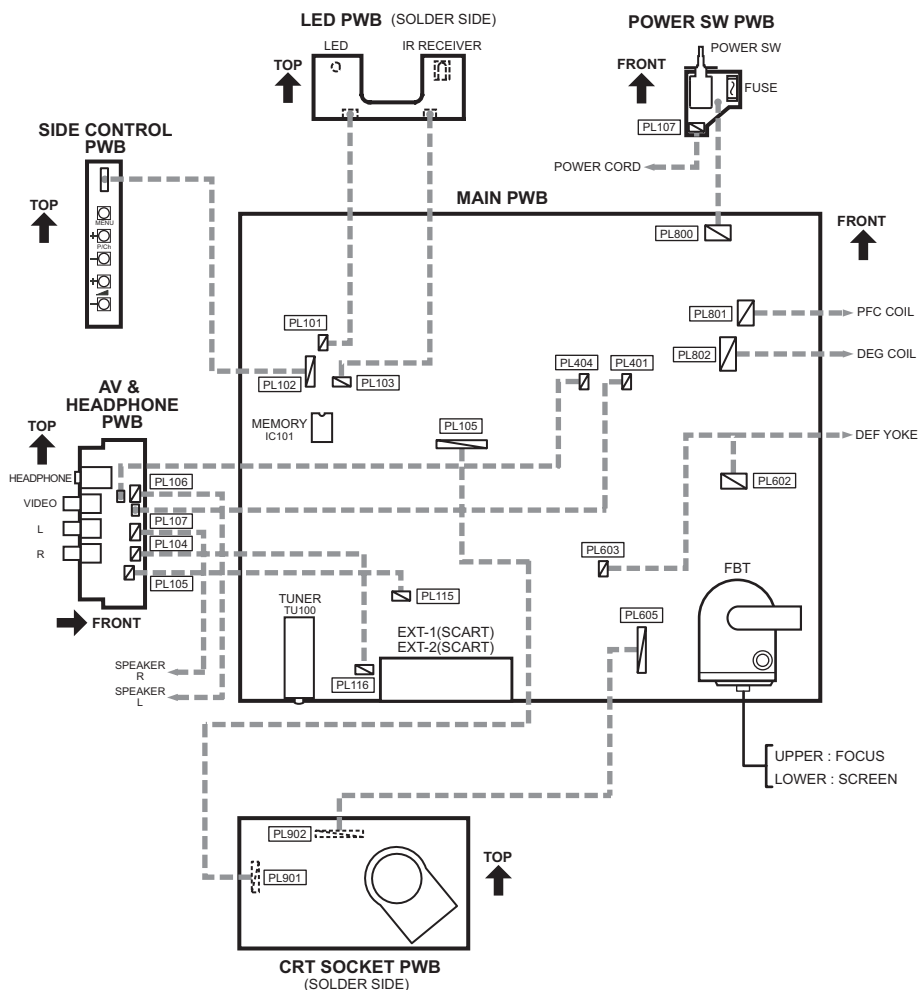
4.2 MEASURING EQUIPMENT

- (1) Signal generator (Pattern generator)
[PAL / SECAM / NTSC]
- (2) Remote control unit

4.3 ADJUSTMENT ITEM

- FOCUS ADJUSTMENT
- SCREEN ADJUSTMENT
- DEFLECTION CIRCUIT ADJUSTMENT

4.4 ADJUSTMENT LOCATIONS



4.5 BASIC OPERATION OF SERVICE MODE

4.5.1 HOW TO ENTER THE SERVICE MODE

- (1) Press the [INFORMATION] key and [MUTING] key simultaneously.
- (2) The SERVICE MENU screen will be displayed.(Fig.1)

SERVICE MENU

AK49-0.0.104-IVC-GR		
224	SAVEFS	000
225	LOADFS	000
226	DCXO	079
227	DCXOA	OFF
001	FAPS	OFF
002	ISPM	OFF
003	INIT	OFF
005	AGCSPD	001
006	AGCTO	033

ADJUSTMENT ITEM SETTING VALUE

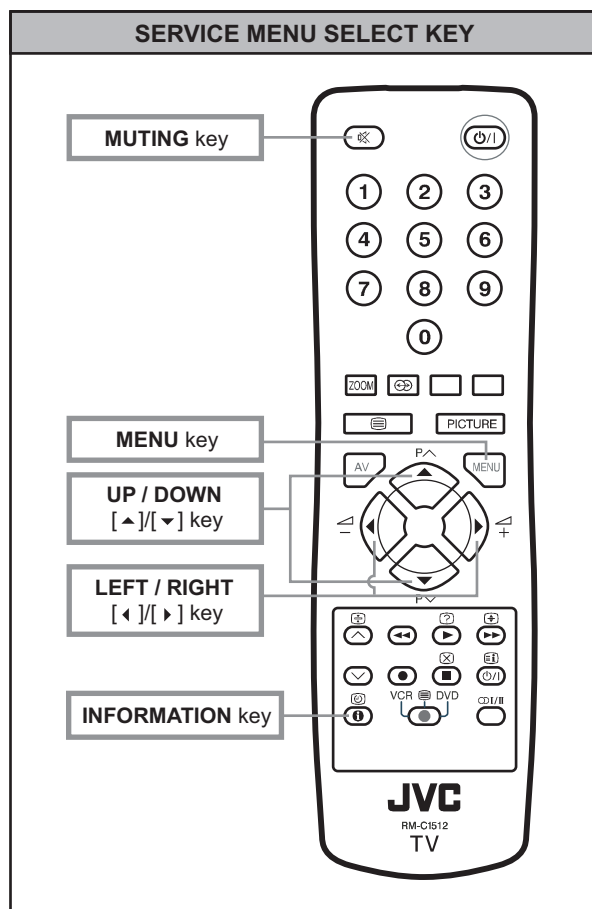
Fig.1

4.5.2 SELECTION OF ADJUSTMENT ITEMS

- (1) Enter the SERVICE MODE
- (2) Press the FUNCTION [▲]/[▼] key to select the adjustment item.
- (3) Press the FUNCTION [◀]/[▶] key to set the setting value.

4.5.3 HOW TO EXIT SERVICE MODE

- (1) Press the [MENU] key.



4.6 INITIAL SETTING VALUES IN THE SERVICE MODE

Item No.	Item name	Variable range	Setting value
001	FAPS	---	---
002	ISPM	ON/OFF	OFF
003	INIT	ON/OFF	OFF
005	AGCSPD	000 - 003	001
006	AGCTO	000 - 063	033
007	COFF	---	---
008	VSD	000 - 063	031
009	VG2	000 - 063	031
010	TUBE	000 = 16:9 001 = 4:3	001
011	VERT ZOOM	000 - 063	035
012	VERT SLOP	000 - 063	037
013	VERT SHIFT	000 - 063	025
014	VERT AMP	000 - 063	033
015	SCORRECTION	000 - 063	032
016	V-LINC	000 - 002	000
017	V-LINEARTY	000 - 063	032
018	EW WIDTH	000 - 063	018
019	HOR SHIFT	000 - 063	031
020	EW PARAB	000 - 063	035
021	TRAPEZ	000 - 063	030
022	UC PARAB	000 - 063	013
023	LC PARAB	000 - 063	016
024	HOR BOW	000 - 063	042
025	PARALLEL	000 - 063	033
026	WBF	000 - 015	014
027	WBR	000 - 015	010
028	WBF14	000 - 015	014
029	WBR14	000 - 015	013
030	60HZ EWW	000 - 063	034
031	60HZ HSH	000 - 063	037
032	60HZ VSH	000 - 063	031
033	60HZ VZ	000 - 063	035
034	ROT	000 - 063	049
035	ROT-M	000 - 001	000
036	OIF	000 - 063	032
037	IF	000 - 007	002
038	OFR	000 - 001	000
039	FFI	000 - 001	000
040	BS1	000 - 015	001
041	BS2	000 - 015	002
042	BS3	000 - 015	008
043	CB	000 - 255	142
044	B1-H	000 - 255	011
045	B1-L	000 - 255	082
046	B2-H	000 - 255	030
047	B2-L	000 - 255	002
048	FRAV	000 - 003	001

Item No.	Item name	Variable range	Setting value
049	YSCM	000 - 015	012
050	YNTS	000 - 015	002
051	YPAL	000 - 015	012
052	YAV1	000 - 015	012
053	YAV2	000 - 015	012
054	Y_S1	000 - 015	012
055	Y_S2	000 - 015	012
056	COMB	000 = Not active 001 = Active	000
058	BLCS	000 = Disable 001 = Enable	000
059	BLUS	000 = Disable 001 = Enable	000
060	WHTS	000 - 003	000
061	CLPR	000 - 003	000
062	OVSH	000 - 003	000
063	TNTD	000 - 063	032
064	SVMA	ON/OFF	OFF
065	SVM	000 - 007	004
066	VMA	000:OFF 001:0.8 Vp-p 002:1.2 Vp-p 003:1.8 Vp-p	001
067	SMD	000:OFF 001:Video 002:TXT/OSD 003:Video/OSD	001
068	SOPW	000 - 003	003
069	SOTM	000 - 007	007
070	WPRC	000 - 063	032
071	WPGC	000 - 063	032
072	WPBC	000 - 063	031
073	BLORC	000 - 063	033
074	BLOGC	000 - 063	033
075	WPRN	000 - 063	037
076	WPGN	000 - 063	032
077	WPBN	000 - 063	019
078	BLRB-RGB	000 - 063	033
079	BLG-RGB	000 - 063	033
080	WPRW	000 - 063	049
081	WPGW	000 - 063	040
082	WPBW	000 - 063	025
083	BLRB-YUV	000 - 063	033
084	BLG-YUV	000 - 063	033
085	WPR-RGB	000 - 063	032
086	WPG-RGB	000 - 063	040
087	WPB-RGB	000 - 063	032
088	OSO	ON/OFF	ON

Item No.	Item name	Variable range	Setting value
089	FSL	000 - 001	000
090	MUS	ON/OFF	OFF
091	PWL	000 - 015	000
092	BPS	ON/OFF	OFF
093	CLPL	000 - 003	000
094	CL	000 - 015	000
095	AKB	ON/OFF	OFF
096	COR	000 - 003	002
098	SSL	000 - 001	001
099	AV2SI	000 = Disable 001 = Enable	001
100	AV3I	000 = Disable 001 = Enable	000
101	FAVI	000 = Disable 001 = Enable	001
102	BAVI	000 = Disable 001 = Enable	000
103	VESI	000 = Disable 001 = Enable	000
104	FSVI	000:Disable Front SVHS if Op_SVHS is enabled 001:Enable Front SVHS if Op_SVHS is enabled	000
105	BSVI	000:Disable Back SVHS if Op_SVHS is enabled 001:Disable Back SVHS if Op_SVHS is enabled	000
106	DVDI	000 = Disable 001 = Enable	000
107	SSTDBG	000 = Disable 001 = Enable	001
108	SSTDI	000 = Disable 001 = Enable	001
109	SSTDDK	000 = Disable 001 = Enable	001
110	SSTD L	000 = Disable 001 = Enable	001
111	NICAM	ON/OFF	ON
112	CNFG	000 = Mono 001 = AV-Stereo 002 = Stereo	002
113	CMUTE	ON/OFF	ON
114	BLNG	000 = Disable 001 = Enable	000
116	OPHP	000 = Disable 001 = Enable	000

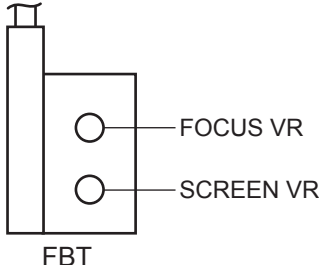
Item No.	Item name	Variable range	Setting value
117	OPEQ	000 = Disable 001 = Enable	000
118	---	---	000
119	V-3D	000 - 063	000
120	---	---	000
121	ODUB	000 - 005	000
122	AVLL	000 - 015	002
123	AVLW	000 - 001	000
124	AVLM	000 - 005	003
125	OPAVL	000 - 001	000
126	AVL	000 - 001	001
127	DECL	000 - 031	015
128	MNLV	000 - 031	015
129	ADCAM	000 - 031	010
130	ADCAV	000 - 031	013
131	NICL	000 - 031	015
132	AV1 PRESCL	000 - 063	046
133	AV2 PRESCL	000 - 063	046
134	E2D	ON/OFF	OFF
135	TXSPLT	000 = Full screen 001 = Split screen	000
136	TXHPOS	000 - 063	000
137	TXEWW	000 - 063	048
138	TXHPA	000 - 063	000
139	TXHPB	000 - 063	000
140	TXHBB	000 - 127	073
141	PATVA	000 - 063	016
142	PATVZ	000 - 063	016
143	PATPARAB	000 - 063	016
144	PATHS	000 - 063	032
145	TXTBRI	000 - 063	032
146	---	---	OFF
147	TXTCN	000 - 015	010
148	LSEL-1	000 - 255	255
149	LSEL-2	000 - 031	031
150	PWPRF	000 = Fast 015 = Perfect	015
151	PWRES	000 = Disable 001 = Enable	001
152	MAXCOL	000 - 063	045
153	MAXBRI	000 - 063	045
154	MAXCON	000 - 063	028
155	PVBRSP	000 - 063	032
156	PVCTSP	000 - 063	032
157	PVCLSP	000 - 063	032
158	PVSHSP	000 - 063	032
159	PVBRMV	000 - 063	032
160	PVCTMV	000 - 063	032
161	PVCLMV	000 - 063	032

Item No.	Item name	Variable range	Setting value
162	PVSHMV	000 - 063	032
163	PVBRWK	000 - 063	032
164	PVCTWK	000 - 063	032
165	PVCLWK	000 - 063	032
166	PVSHWK	000 - 063	032
167	PABAMM	000 - 063	031
168	PATRMM	000 - 063	015
169	PAB1MM	000 - 063	042
170	PAB2MM	000 - 063	058
171	PAB3MM	000 - 063	045
172	PAB4MM	000 - 063	040
173	PAB5MM	000 - 063	058
174	PABAMU	000 - 063	039
175	PATRMU	000 - 063	034
176	PAB1MU	000 - 063	040
177	PAB2MU	000 - 063	050
178	PAB3MU	000 - 063	055
179	PAB4MU	000 - 063	060
180	PAB5MU	000 - 063	063
181	PABATH	000 - 063	034
182	PATRTH	000 - 063	036
183	PAB1TH	000 - 063	030
184	PAB2TH	000 - 063	055
185	PAB3TH	000 - 063	063
186	PAB4TH	000 - 063	050
187	PAB5TH	000 - 063	040
188	PABASP	000 - 063	034
189	PATRSP	000 - 063	036
190	PAB1SP	000 - 063	036
191	PAB2SP	000 - 063	044
192	PAB3SP	000 - 063	044
193	PAB4SP	000 - 063	040
194	PAB5SP	000 - 063	024
198	CTI1	000 - 255	032
199	CTI2	000 - 255	008
200	CTI3	000 - 255	228
201	P BS1	000 - 015	001
202	P BS2	000 - 015	002
203	P BS3	000 - 015	004
204	P CB	000 - 255	142
205	P B1H	000 - 255	012
206	P B1L	000 - 255	032
207	P B2H	000 - 255	030
208	P B2L	000 - 255	002
209	P BRI	000 - 015	007
210	P CON	000 - 015	010
211	P AGC	000 - 255	023
212	P YPAL	000 - 015	000
213	P YSCM	000 - 015	000

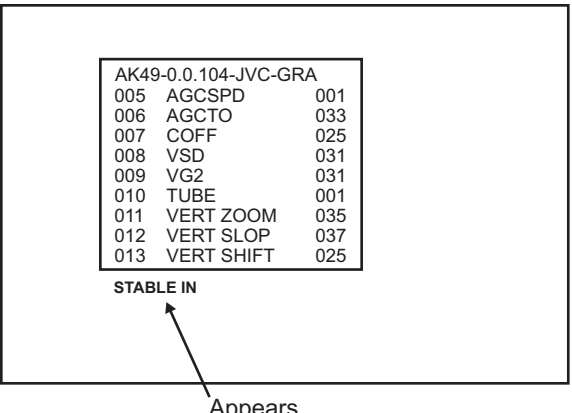
Item No.	Item name	Variable range	Setting value
214	OFB	000 - 063	001
215	PGR	000 - 127	070
216	PGG	000 - 127	080
217	PGB	000 - 127	070
218	REMOTE	---	---
219	PIPPAP	---	---
220	CABINE	---	---
221	ZOOME	---	---
222	---	---	---
223	---	---	---
224	SAVEFS	000 - 001	000
225	LOADFS	000 - 001	000
226	DCXO	000 - 127	079
227	DCXOA	ON/OFF	OFF

4.7 ADJUSTMENTS PROCEDURE

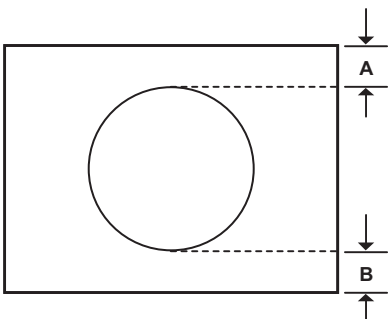
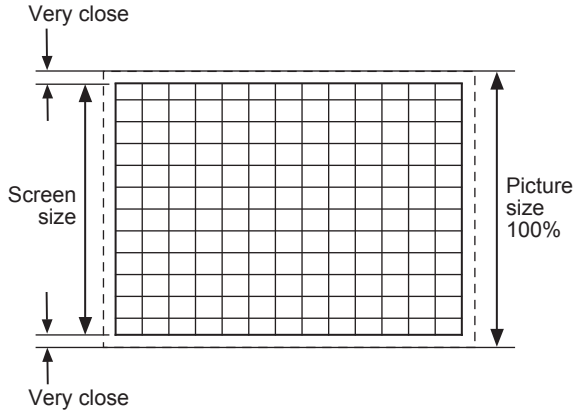
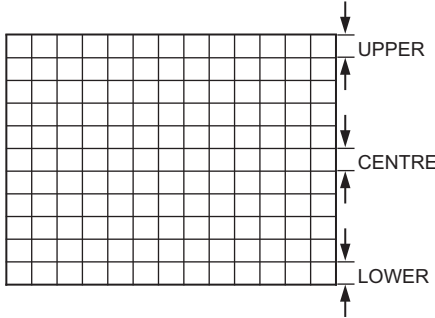
4.7.1 FOCUS ADJUSTMENT

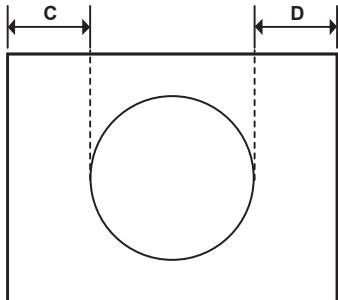
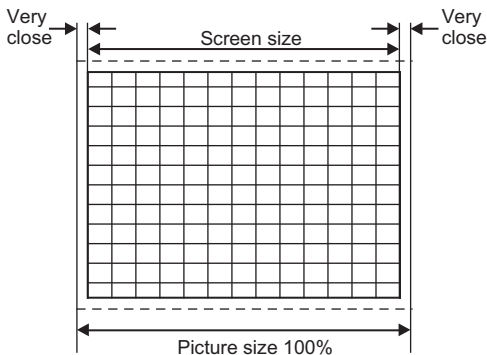
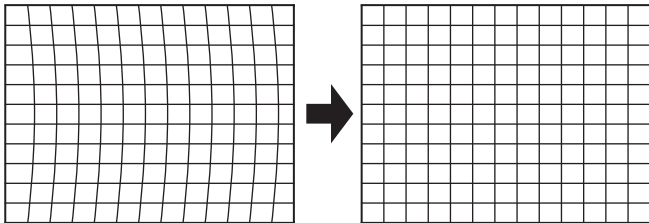
Item	Measuring instrument	Test point	Adjustment part	Description
FOCUS adjustment	Signal generator Remote control unit		FOCUS VR [On the FBT]	<p>(1) Receive a crosshatch signal. (2) Adjust FOCUS VR on the FBT for the lines to become as thin as possible.</p> 

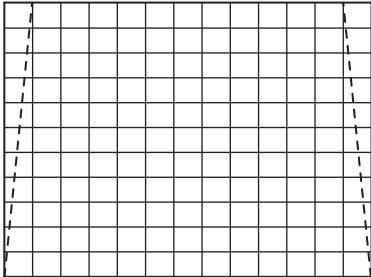
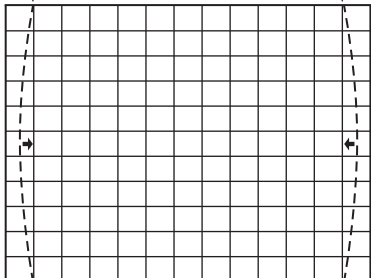
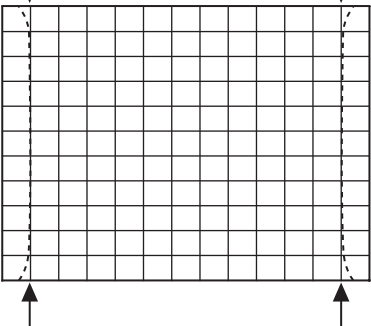
4.7.2 SCREEN ADJUSTMENT

Item	Measuring instrument	Test point	Adjustment part	Description
SCREEN adjustment	Remote control unit		SCREEN VR [On the FBT] 009 VG2 [SERVICE MODE]	<p>(1) Enter the SERVICE MODE. (2) Select VG2. (3) Adjust the SCREEN VR until the "STABLE IN" sign appears on the screen.</p> 

4.7.3 DEFLECTION CIRCUIT ADJUSTMENT

Item	Measuring instrument	Test point	Adjustment part	Description
VERTICAL SHIFT adjustment	Signal generator		013 VERT SHIFT	(1) Receive a circle pattern signal. (2) Enter the SERVICE MODE. (3) Select VERT SHIFT . (4) Adjust VERT SHIFT to make A=B . (5) Check and readjust VERT SHIFT item if the adjustment becomes improper after some other geometric adjustments are done.
	Remote control unit			
				
VERTICAL SIZE adjustment	Signal generator		014 VERT AMP	(1) Receive a crosshatch signal. (2) Enter the SERVICE MODE. (3) Select VERT AMP . (4) Adjust VERT AMP until horizontal black lines on both the upper and lower part of the crosshatch pattern become very close to the upper and lower horizontal sides of picture size and nearly about to disappear. (5) Check and readjust VERT AMP item if the adjustment becomes improper after some other geometric adjustments are done.
	Remote control unit			
				
VERTICAL S-CORRECTION & LINEARITY adjustment	Signal generator		015 SCORRECTION 017 V-LINEARITY	(1) Receive a crosshatch signal. (2) Enter the SERVICE MODE. (3) Select SCORRECTION . (4) Adjust SCORRECTION until the size of squares on both the upper and lower part of crosshatch pattern become equal to the squares laying on the vertical centre of the crosshatch pattern. (5) Check and readjust SCORRECTION item if the adjustment becomes improper after some other geometric adjustments are done. (6) Select V-LINEARITY . (7) Adjust V-LINEARITY until all the size of squares of the crosshatch pattern become in equal size from the top of the screen to its bottom of the whole screen. (8) Check and readjust V-LINEARITY item if the adjustment becomes improper after some other geometric adjustments (especially after than SCORRECTION adjustment) are done.
	Remote control unit			
				

Item	Measuring instrument	Test point	Adjustment part	Description
HORIZONTAL SHIFT adjustment	Signal generator Remote control unit		019 HOR SHIFT	(1) Receive a circle pattern signal. (2) Enter the SERVICE MODE. (3) Select HOR SHIFT . (4) Adjust HOR SHIFT to make C=D . (5) Check and readjust HOR SHIFT item if the adjustment becomes improper after some other geometric adjustments are done.
				
HORIZONTAL SIZE adjustment	Signal generator Remote control unit		018 EW WIDTH	(1) Receive a crosshatch signal. (2) Enter the SERVICE MODE. (3) Select EW WIDTH . (4) Adjust EW WIDTH until no white bars on both the left and right sides of the crosshatch will be visible nor screen will be so wide. (5) Check and readjust EW WIDTH item if the adjustment becomes improper after some other geometric adjustments are done.
				
BOW adjustment	Signal generator Remote control unit		024 HOR BOW	(1) Receive a crosshatch signal. (2) Enter the SERVICE MODE. (3) Select HOR BOW . (4) Adjust HOR BOW until the vertical lines become straight. (5) Check and readjust HOR BOW item if the adjustment becomes improper after some other geometric adjustments are done.
				NOTE : In case where there is a bow-shaped distortion of images on the screen. (Figure)

Item	Measuring instrument	Test point	Adjustment part	Description
TRAPEZIUM adjustment	Signal generator		021 TRAPEZ	<div>(1) Receive a crosshatch signal.</div> <div>(2) Enter the SERVICE MODE.</div> <div>(3) Select TRAPEZ.</div> <div>(4) Adjust TRAPEZ until vertical lines, especially lines at the sides of the picture frame become parallel to the both sides of picture tubes as close as possible.</div> <div>(5) Check and readjust TRAPEZ item if the adjustment becomes improper after some other geometric adjustments are done.</div>
	Remote control unit			
<div><div>Parallel</div></div>				
SIDE PIN adjustment	Signal generator		020 EW PARAB	<div>(1) Receive a crosshatch signal.</div> <div>(2) Enter the SERVICE MODE.</div> <div>(3) Select EW PARAB.</div> <div>(4) Adjust EW PARAB until vertical lines close to the both sides of the picture frame become straight to vertical sides of picture tube without any bending to left or to right side of the screen.</div> <div>(5) Check and readjust EW PARAB item if the adjustment becomes improper after some other geometric adjustments are done.</div>
	Remote control unit			
<div><div>Straight</div></div>				
CORNER adjustment	Signal generator		022 UC PARAB 023 LC PARAB	<div>(1) Receive a crosshatch signal.</div> <div>(2) Enter the SERVICE MODE.</div> <div>(3) Select UC PARAB.</div> <div>(4) Adjust UC PARAB until vertical lines at the upper corners of the picture frame become vertical and parallel to vertical corner sides of picture tube.</div> <div>(5) Check and readjust UC PARAB item if the adjustment becomes improper after some other geometric adjustments are done.</div> <div>(6) Select LC PARAB.</div> <div>(7) Adjust LC PARAB until vertical lines at the lower corners of the picture frame become vertical and parallel to vertical corner sides of picture tube.</div> <div>(8) Check and readjust LC PARAB item if the adjustment becomes improper after some other geometric adjustments are done.</div>
	Remote control unit			
<div><div>Straight</div><div>Straight</div></div>				

SECTION 5

TROUBLESHOOTING

This service manual does not describe TROUBLESHOOTING.



Victor Company of Japan, Limited
Display Category 12, 3-chome, Moriya-cho, Kanagawa-ku, Yokohama-city, Kanagawa-prefecture, 221-8528, Japan

(No.YA085C)



Printed in Japan
VPT



JVC

JVC

AV-29QT4BU
AV-29QT4SU

COLOUR TELEVISION

INSTRUCTIONS

TELEVISEUR COULEUR
KLEURENTELEVISIE
TELEVISOR A COLOR
FARBFERNSEHGERÄT
TELEVISORE A COLORI
TELEVISOR A CORES

MANUEL D'INSTRUCTIONS
GEBRUIKSAANWIJZING
MANUAL DE INSTRUCCIONES
BEDIENUNGSANLEITUNG
ISTRUZIONI
INSTRUÇÕES



50086700

0506TKH-VT-VT



Contents

Safety Precautions	1
Remote Control Buttons	2
TV Buttons and Functions and Rear Panel	3
Antenna Connections	3
Preparation	4
Features	4
Before Switching on your TV	4
Power connection	4
Connections to the RF input socket	4
How to connect other devices	4
Inserting batteries into the remote control	4
Switching the TV ON/OFF	4
To switch the TV on	4
To switch the TV off	4
Initial Settings	4
T-V LINK	5
Basic Operations	6
Setting the TV	6
Picture Menu	6
Sound Menu	7
Feature Menu	8
Installation Menu	8
Programme Menu	9
Other Features	10
Teletext	11
Peripheral Equipment Connections	12
Tips	14
Specifications	14

Safety Precautions

1. Power Source

The receiver should be operated only from a **220-240V AC, 50 Hz.** outlet. Ensure you select the correct voltage setting for your convenience.

2. Power Cord

The power supply cord should be placed so that they are not likely to be walked on or pinched by items placed upon them or against them. Pay particular attention to cord where they enter the plug, power outlet, and the point where they exit from the receiver.

3. Moisture and Water

Do not use this equipment in a humid and damp place (avoid the bathroom, the sink in the kitchen, and near the washing machine). Do not expose this equipment to rain or water and do not place objects filled with liquids on it as this may be dangerous.

4. Cleaning

Before cleaning, unplug the receiver from the main supply outlet. Do not use liquid or aerosol cleaners. Use with soft and dry cloth.

5. Ventilation

The slots and openings on the receiver are intended for ventilation and to ensure reliable operation. To prevent overheating, these openings must not be blocked or covered in anyway.

6. Lightning

In case of storm and lightning or when going on holiday, disconnect the power cord from the wall outlet.

7. Replacement Part

When replacement parts are required, be sure the service technician has used replacement parts which are specified by the manufacturer or have the same specifications as the original one. Unauthorized substitutions may result in fire, electrical shock, or other hazards.

8. Servicing

Please refer all servicing to qualified personnel. Do not remove cover as this may result in electric shock.

9. Flame sources

Do not place naked flame sources on the apparatus.

10. Stand-By

Do not leave your TV stand-by or operating condition when you leave your house.

Warning!

Any intervention contrary to regulations, in particular, any modification of high voltage or a replacement of the picture tube may lead to an increased concentration of x-rays. Any television modified in this way no longer complies with license and must not be operated.

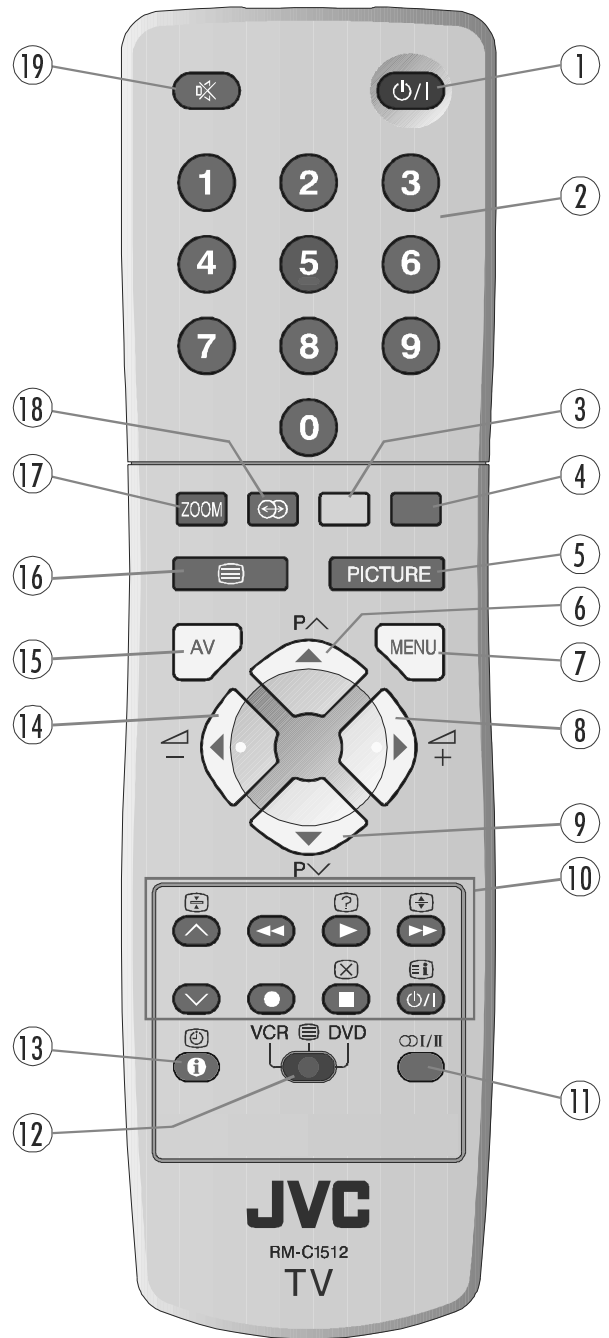
Instructions for waste disposal:

Packaging and packaging aids are recyclable and should principally be recycled. Packaging materials, such as foil bag, must be kept away from children.

Batteries, including those which are heavy metal-free, should not be disposed of with household waste. Please dispose of used batteries in an environmentally sound manner. Find out about the legal regulations which apply in your area.

Remote Control Buttons

- ① = Stand By / Power
- ② **0 - 9** = Direct Program
- ③ Yellow Button
- ④ Blue Button / Factory Settings in Picture Menu
- ⑤ **PICTURE** = Picture Mode Change
- ⑥ **▲ (P^)** = Programme Up (Cursor Up)
- ⑦ **MENU** = Menu Button
- ⑧ **▶ (P↗)** = Cursor Right / Volume +
- ⑨ **▼ (P∨)** = Programme Down (Cursor Down)
- ⑩ Teletext / VCR / DVD Control Buttons
- ⑪ = Stereo / Bilingual Button
- ⑫ = VCR / / DVD Switch
- ⑬ = Information Button / T-V Link in Program Menu
- ⑭ **◀ (P↖)** = Cursor Left / Volume -
- ⑮ **AV** = AV Button
- ⑯ = Teletext Button
- ⑰ **ZOOM** = Zoom (Picture Size) Change / Red Button
- ⑱ = Hyper Sound / Green Button
- ⑲ = Mute



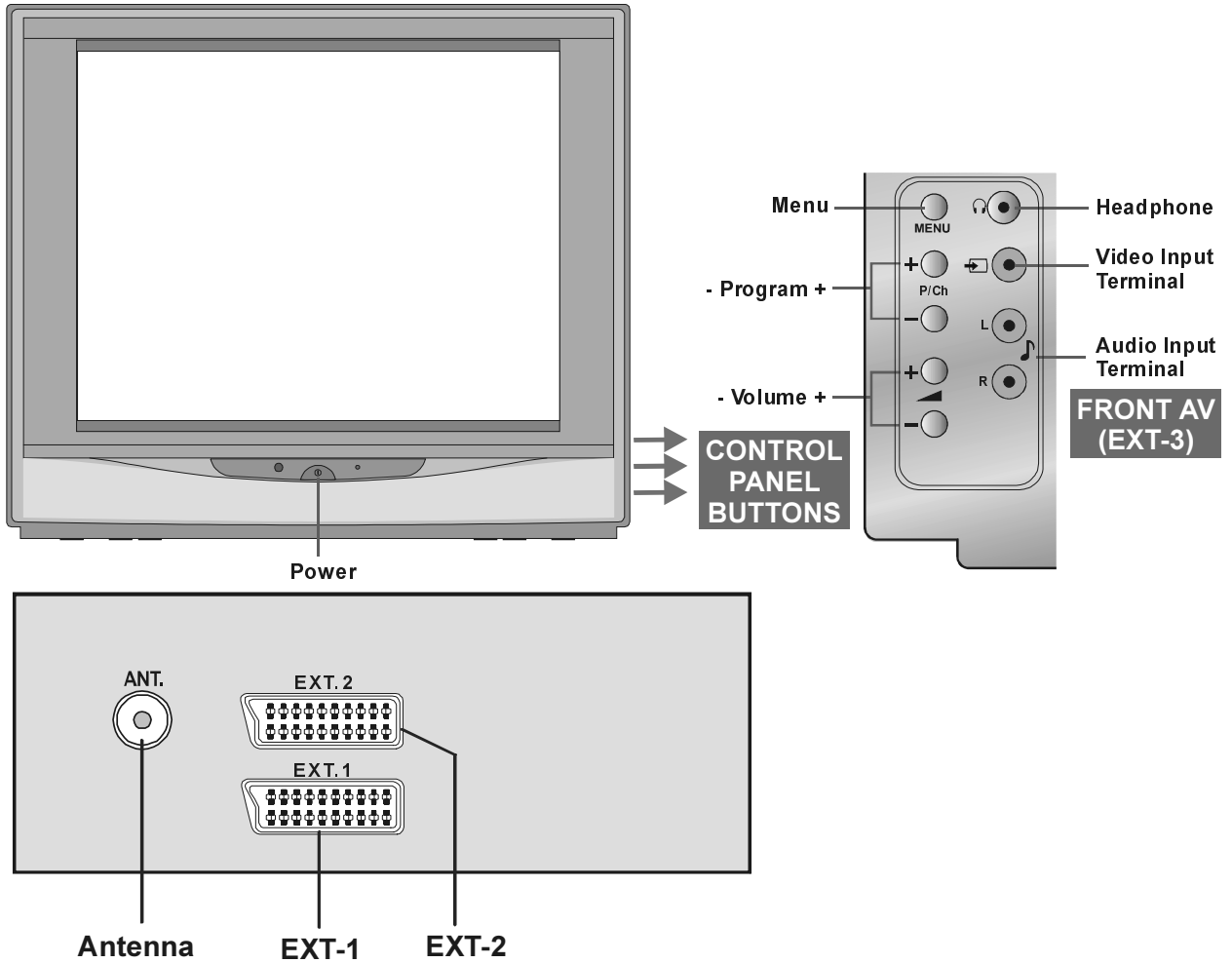
CAUTION RISK OF ELECTRIC SHOCK



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock of persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

TV Buttons and Functions and Rear Panel

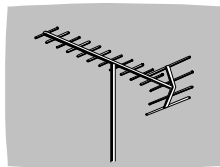


Antenna Connections

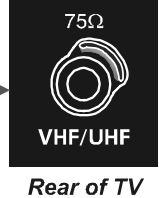
Outdoor Antenna Connections

VHF antenna

Method 1

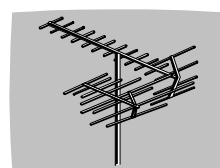


Round 75 ohm coaxial cable



VHF/UHF antenna

Method 2



Flat 300-ohm twin lead cable

Round 75-ohm coaxial cable



Preparation

Place TV on a solid surface.

For ventilation, leave a space of at least 10 cm free all around the set. To prevent any fault and unsafe situations, please do not place any objects on top of the set.

"Use this apparatus in tropical and moderate climates."

Features

- It is a remote controlled colour television.
- 100 programmes from VHF, UHF bands or cable channels can be preset.
- It can tune cable channels.
- Controlling the TV is very easy by its menu driven system.
- It has two Euroconnector sockets for external devices (such as computer, video, video games, audio set, etc.)
- A2+NICAM Stereo sound system.
- Teletext (Fastext, Toptext).
- It is possible to connect headphone.
- Direct channel access.
- A.P.S. (Automatic Programming System).
- All programmes can be named.
- Programme swapping between last watched two programmes.
- Forward or backward automatic tuning.
- Sleep timer.
- Child Lock.
- Automatic sound mute when no transmission.
- When no valid signal is detected, after 5 minutes the TV switches itself automatically to stand-by mode.
- NTSC Playback.
- S-VHS (via SCART)
- Real Flat

Before Switching on your TV

Power connection

IMPORTANT: The TV set is designed to operate on **220-240V AC, 50 Hz**.

- After unpacking, allow the TV set to reach the ambient room temperature before you connect the set to the mains.

Connections to the RF input socket

- Connect the aerial or cable TV plug to the RF input socket located at the back of the TV and connect the cable plug coming out from the TV out socket located at the devices (VCR, DVB etc.) to this socket as well.

How to connect other devices

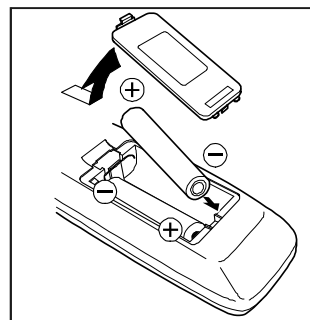
IMPORTANT: Switch off the TV before connecting any external device.

Sockets for external connections are at the back and on the TV. For connection of other devices via Euroconnector refer to the manuals of the related devices.

Inserting batteries into the remote control

- Remove the battery cover located on the back of the remote control by gently pulling downwards from the indicated part.
- Insert two **AA (R06)** or equivalent type batteries inside. Place the batteries in the right directions as seen below.

- Replace the battery cover.



NOTE: Remove batteries from remote control when it is not to be used for a long period. Otherwise it can be damaged due to any leakage of batteries.

Switching the TV ON/OFF

To switch the TV on

Your TV will switch on in two steps:

- 1- Press the power button located on the front of the TV. Then the TV switches itself to standby mode and the power lamp becomes RED located on the lower part of the TV.
- 2- To switch on the TV from stand-by mode either:

Press the "⏻ / I" button on the remote control,
or,

Press a digit button on the remote control so that a programme number is selected,
or,

Press Programme Up or Down buttons on the TV or on the remote control, so that last switched off programme is selected.

The TV will switch on and the power lamp will be GREEN.

To switch the TV off

- Press the stand-by button on the remote control, so the TV will switch to stand-by mode and the power lamp will become RED,
- or,
- Press the power button located on the front of the TV, so the TV will switch off and the power lamp will turn off.

Initial Settings

When the TV is first turned on, it goes into the initial settings mode. Follow the instructions on the screen display to make the initial settings.

Note: If the TV does not go into the initial settings mode this is because your TV has already been turned on for the first time. (Perform "AUTO STORE" (see page 9) in the PROGRAMME menu.)

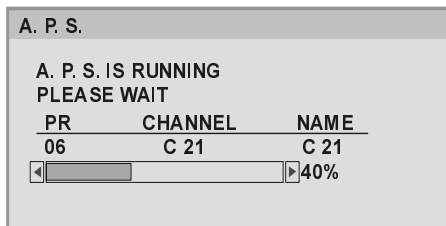
Because this is the first time that TV has been used, there are no channels stored in the memory. Analogue terrestrial broadcasting AUTOMATIC PROGRAMMING SYSTEM (A.P.S.) window is displayed.

A. P. S.

PLEASE CHECK ANTENNA CABLE
AUTOSTORE

COUNTRY	UK
LANGUAGE	ENGLISH
CONTINUE	

- If you do not want to start **A.P.S.**, you can cancel it by pressing the **MENU** button on your remote control.
- First select your country by pressing “◀” or “▶” button. This will affect the sort process in APS.
- By pressing the “▲” or “▼” buttons, come to the Language item and select the language in which the menus of the TV will appear. You can see the available languages by pressing “◀” or “▶” button. As soon as you change the language, the menu items will be displayed in the selected language.
- To select “Continue” use “▲” or “▼” button. By pressing “◀” or “▶” button start the **A.P.S.**
- When you start **A.P.S.** the following window will appear on the screen.



After APS is finalized, a programme list will appear on the screen. In the programme list you will see the programme numbers and names assigned to the programmes.

If you do not accept the locations and / or the programme names of programmes, you can change them in Program menu. For details see PROGRAMME menu on **page 9**.

If you do not have a T-V LINK compatible VCR, press **BLUE** button to exit the menu.

If you have a T-V LINK compatible VCR connected to the EXT.2 terminal, press “**i**” button to display T-V LINK menu. Then follow the operating procedure “Downloading data to VCR” in the following T-V LINK section.

T-V LINK

When a T-V LINK compatible VCR is connected to the EXT.2 terminal on the TV, it is easier to set up the VCR and to view videos. T-V LINK uses the following features:

To use T-V LINK functions

A “T-V LINK compatible VCR” means a JVC video cassette recorder with the T-V LINK logo, or with one of the following logos. For details see your VCR instruction manual.

“**Q-LINK**” (A trademark of Panasonic Corporation)

“**Data Logic**” (A trademark of Metz Corporation)

“**Easy Link**” (A trademark of Philips Corporation)

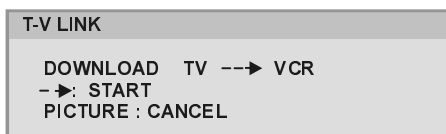
“**Megallogic**” (A trademark of Grundig Corporation)

“**SMARTLINK**” (A trademark of Sony Corporation)

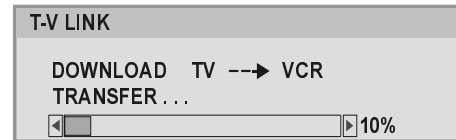
Downloading data to VCR:

The VCR will automatically download the registered data on the TV channels from the TV. This means you do not need to set up the programme channels on your VCR manually.

The “T-V LINK” menu will be displayed when you press the “**i**” button while PROGRAM menu is displayed.



Press “▶” button to start downloading data to VCR. “TRANSFER” is displayed in the menu. Transfer bar can only be seen after APS.



If you do not want to continue press the **PICTURE** button to exit the menu.

If “FEATURE NOT AVAILABLE” is displayed, download was not performed correctly. Before trying to download again, check that:

- The VCR power is turned on.
- The VCR is T-V LINK compatible.
- The VCR is connected to the EXT.2.
- The scart cable is fully wired.

Direct REC:

You can easily record to VCR the images that you are watching on the TV. For details, read the manual for your VCR. Use your VCR controls. “VCR IS RECORDING” is displayed. You can not carry out Direct REC using your TV’s control.

When the VCR is not ready (For example when there is no tape inserted), “NO RECORDING” is displayed.

When you press the following buttons (⏻ / **i**, **AV**, **MENU**, **BACK**, **SUBTITLE**, **GUIDE**, **ZOOM**, **PV** / **PA**, number buttons) during recording, a message appears asking if you want to stop recording or not. Press “◀” or “▶” button to stop recording or **BLUE** button to continue recording.

Do not turn the TV off in the following cases:

- When recording images from an external device connected to TV (For example camcorder).
- When recording a TV channel after it has been unscrambled on a decoder.
- When recording a TV channel by using the TV’s output because the VCR’s own tuner can not properly receive that channel.

TV autpower on/VCR image view:

When the VCR starts playing, the TV automatically turns on and images from EXT2 appear on the screen.

This function does not happen if your TV’s main power is turned off. Set your TV’s main power to on (StandBy Mode).

Basic Operations

You can operate your TV using both the remote control and onset buttons.

Operation with the buttons on the TV

Volume Setting

- Press “-” button to decrease volume or “+” button to increase volume, so a volume level scale (slider) will be displayed at the middle of the bottom on the screen.

Programme Selection

- Press “**P/CH +**” button to select the next programme or “**P/CH -**” button to select the previous programme.

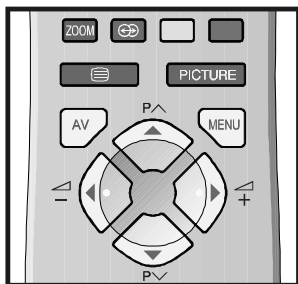
Entering Main Menu

- Press “**MENU**” button to enter Main menu. In the Main menu select sub-menu using “**P/CH -**” or “**P/CH +**” button and enter the sub-menu using “-” or “+” button. To learn the usage of the menus, refer to the Menu System sections.

Operation with Remote Control

The remote control of your TV is designed to control all the functions of the model you selected. The functions will be described in accordance with the menu system of your TV.

Functions of the menu system are described in following sections.



Volume Setting

Press “+” button to increase volume. Press “-” button to decrease volume. A volume level scale (slider) will be displayed in the middle at the bottom of the screen.



Programme Selection (Previous or next programme)

- Press “**P**” button to select the previous programme.
- Press “**P**” button to select the next programme.

Programme Selection (direct access):

Press digit buttons on the remote control to select programmes between 0 and 9. TV will switch to the selected programme. To select programmes between 10 - 99, press the digit buttons consecutively which programme you want to select (eg. for programme 27, first press 2 and then 7). When it is late to press second digit button only the first digit programme will be displayed. The limit of the delay time is 3 seconds.

Example: PR6 → press 6, PR12 → press 1 and 2.

Press directly the programme number to reselect single digit programmes.

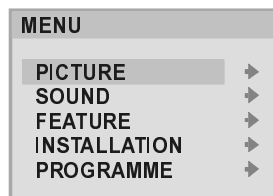
Setting the TV

Menu System

Your TV has been designed with a menu system, to provide an easy manipulation of a multi-function system. The TV is controlled by choosing the commands, which are displayed on the screen.

MAIN MENU

Press the “**MENU**” button. The **MENU** will be displayed in the middle on the screen.

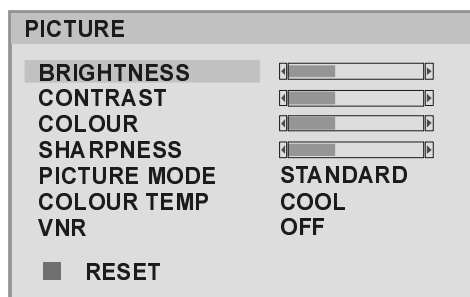


To select a sub-menu use “” or “” button, and press “-” or “+” button.

Use the “**MENU**” button to go back to the previous programme when the menu does not appear on the screen.

Picture Menu

Press “**MENU**” button, now you are in main menu. In the Main menu, select “**Picture**” using “” or “” button, then enter the Picture menu by pressing “-” / “+”.



Setting Brightness

- As you enter the picture menu, Brightness will be the first selected option.
- Press “+” button to brighten the picture.
- Press “-” button to darken the picture.

Setting Contrast

Contrast is the difference and distribution of light and dark tones in an image.

- Using “” or “” button select Contrast.
- Press “+” button to increase contrast level.
- Press “-” button to decrease contrast level.

Setting Colour

- Using “” or “” button select Colour.
- Press “+” button to increase colour saturation.
- Press “-” button to decrease colour saturation.

Setting Sharpness

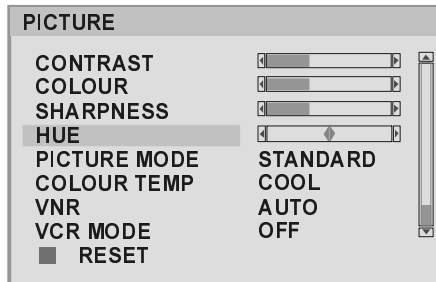
- Using “” or “” button select Sharpness.

- Press “▶” button to sharpen the picture.
- Press “◀” button to soften the picture.

Setting Hue (In AV mode only)

(During Playback NTSC system, this will appear in AV mode only when NTSC video source is applied. Otherwise, HUE option is invisible in Picture menu.):

- Using “▲” or “▼” button select Hue.
 - Press “▶” button to increase the green tones.
 - Press “◀” button to increase the red tones.
- Center value is indicated with two reciprocal arrows.



Setting Picture Mode

This item is used to change the picture mode. By pressing “◀” or “▶” button you may select one of these options: **STANDARD**, **SOFT** and **BRIGHT**.

You can also set the Picture Mode by pressing the Blue button directly.

Setting Colour Temp

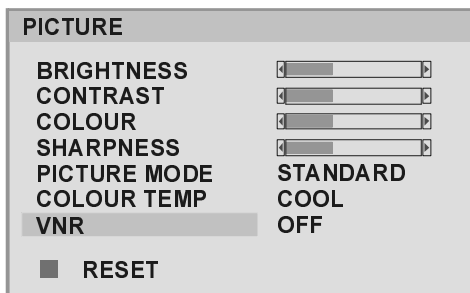
This item is used for white colour tint adjustment. By pressing “◀” or “▶” button you may select one of these options: **COOL**, **NORMAL**, **WARM**.

Setting VNR (Video Noise Reduction)

This item is used to reduce the image noise and improve the picture quality at weak signals.

- Using “▲” or “▼” button select VNR.
- Press “◀” or “▶” button to set VNR level to **OFF**, **MIN**, **AUTO** or **MAX**.

AUTO adjusts the VNR level to **OFF**, **MIN** or **MAX** automatically according to the intensity of the noise.



Setting VCR Mode (In AV mode only)

- Using “▲” or “▼” button select VCR Mode.
- When you watch a picture from your VCR and the picture is unstable, you may improve it by changing the “**VCR MODE**” setting from “**OFF**” to “**ON**”.

Reset

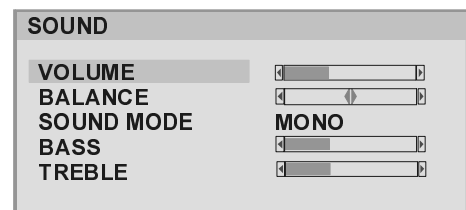
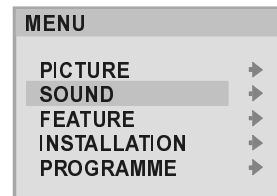
Press BLUE button to reset the picture modes to factory default settings.

To Store the Settings

In the Picture Menu, all settings are stored automatically.

Sound Menu

- Press “**MENU**” button, now you are in **MENU**. In the **MENU**, select **SOUND** using “▲” or “▼” button, then enter the sound menu by pressing “◀” or “▶” button.



Setting Volume

As you enter the sound menu, Volume will be the first selected option.

- Press “▶” button to increase volume.
- Press “◀” button to decrease volume.

Or you can directly change the volume settings using “◀ +” (to increase) or “- ▶” (to decrease) button.

Setting Balance

It allows adjusting the distribution between the left and right speakers.

- Using “▲” or “▼” button select Balance.
- Press “▶” button to change balance to the right.
- Press “◀” button to change balance to the left.

When balance control is in mid position, the cursor is displayed with two reciprocal arrows.

Selecting Sound Mode

- Using “▲” or “▼” button select Sound Mode.
- Press “◀” or “▶” button to change Mode.

You can select **MONO**, **STEREO**, **DUAL-I** or **DUAL-II** mode, only if the selected channel supports that mode.

In case of bilingual broadcast (Dual Sound), you can select original or dubbed language using mode option.

Setting Bass Level

- Using “▲” or “▼” button select Bass Level.
- Press “▶” button to increase bass level.
- Press “◀” button to decrease bass level.

Setting Treble Level

- Using “▲” or “▼” button select Treble

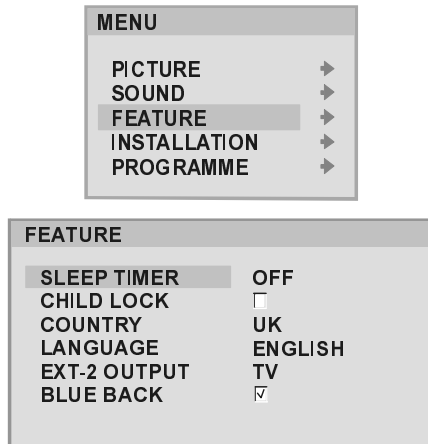
- Press “▶” button to increase treble level.
- Press “◀” button to decrease treble level

To Store the Settings

In the Sound Menu, all settings are stored automatically.

Feature Menu

- Press “MENU” button, now you are in **MENU**. In the **MENU**, select **Feature** using “▲” or “▼” button. Then enter the **Feature** menu by pressing “◀” or “▶” button.



Sleep Timer

As you enter the **Feature** menu, **Sleep Timer** will be the first selected option. Use “◀” or “▶” button to change the Sleep Timer values between **OFF, 10, 20, 30,, 110 and 120**.

If sleep timer is activated, at the end of the selected time, the TV goes automatically to stand-by mode.

You can also set the Sleep Timer by pressing the Yellow button directly.

Child Lock

You can use this feature to prevent children turning the TV on or changing programs or adjustments etc. without remote control.

The **Child Lock** feature can be set by “◀” or “▶” button to either **ON** or **OFF**. When **OFF** is selected, there will be no difference in the operation of your TV. When **ON** is selected, the TV can only be controlled by the remote control handset. In this case, the front panel buttons (except the Power On/Off button) will not work.

If Child Lock is ON, when one of the front panel buttons (except power button) is pressed, “**CHILD LOCK**” OSD is seen on the screen.

Selecting Country

- Using “▲” or “▼” button select Country.
- Press “◀” or “▶” button to select the desired country settings.

Selecting Language

Menu language can be selected by pressing “◀” or “▶” button on **Language** item.

Ext-2 Output

- Using “▲” or “▼” button select Ext-2 Output.

- Press “◀” or “▶” button to select the source which will be given. From Ext-2 output, either **EXT1, EXT3** or **TV** can be selected.

Blue Back

You can set the TV to automatically change to a blue screen if the signal is weak or absent, or when there is no input from an external device.

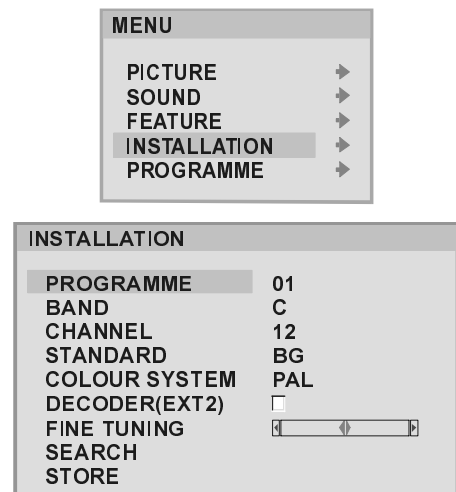
The **Blue Background** feature can be turned on or off by pressing “◀” or “▶” button.

To Store Settings

In **Feature** menu all settings are stored automatically.

Installation Menu

- Press “MENU” button, now you are in **MENU**. In the **MENU**, select **INSTALLATION** using “▲” or “▼” button. Then enter the Installation menu by pressing “◀” or “▶” button.



Selecting Programme

To select programme number, you can use “◀” or “▶” button or Digit Buttons.

Selecting Band

BAND, can be selected either “C” or “S” by pressing “◀” or “▶” button.

Selecting Channel

CHANNEL can be changed by “◀” or “▶” button or Digit Buttons.

For band C,

01 - 83, *WEST EUROPE.*

01 - 12, 21 - 69, *EAST EUROPE .*

01 - 17, 21 - 73, *UK.*

01 - 76, *FRANCE.*

04 - 09, *FRANCE 2.*

For band S,

01 - 41, *for all channel tables.*

Selecting Standard

STANDARD can be selected **BG, I, L** or **DK** by pressing “◀” or “▶” button.

Selecting Colour System

Using “◀” or “▶” button on **Colour System**, you can change the colour system to **PAL**, **SECAM** or **AUTO**.

Note: In EXT mode, you can choose NTSC 3.58 and NTSC 4.43 as well.

Selecting Decoder (EXT2)

You can use this mode to connect any decoder to your TV.

- Press the “◀” or “▶” buttons to turn it on or off.

When you turn Decoder on, EXT-2 output will be chosen as TV mode only and any scrambled channels will be unscrambled through decoder connected your TV via EXT-2 output.

Decoder setting should be stored separately for each programme.

Selecting Fine Tuning

You can use the Fine Tuning process for fine adjustment (after coarse adjustment), if you are not happy with the image on the screen.

Use “◀” or “▶” button on **FINE TUNING** item, until getting the best image on the screen.

In Channel option, normally the Fine Tuning cursor is placed at the middle on the slider, and this is indicated with two reciprocal arrows.

Selecting Search

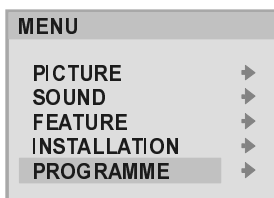
- Using “▲” or “▼” button select Search item.
- Press “◀” or “▶” button in order to start channel search. “**SEARCHING...**” is displayed during the search process. Searching is stopped as soon as a station is found or “▲”, “▼”, “◀”, “▶” buttons are pressed.

To Store Settings

- Using “▲” or “▼” button select Store.
- Press “◀” or “▶” button to store Installation menu settings.

Programme Menu

- Press “**MENU**” button, now you are in **MENU**. In the **MENU**, select **PROGRAMME** using “▲” or “▼” button. Then enter the Program menu by pressing “◀” or “▶” button.



PROGRAM		PR 01	
01 C 12	11	----	21
02 C 23	12	----	22
03 C 45	13	----	23
04 C 47	14	----	24
05 C 50	15	----	25
06 C 55	16	----	26
07	----	17	----
08	----	18	----
09	----	19	----
10	----	20	----
■ NAME		■ INSERT	
■ DELETE		■ AUTOSTORE	
I→T-V LINK			

Moving cursor to four directions you can reach 30 programmes in the same page. You can scroll the pages up or down by pressing the navigation buttons.

By cursor action, programme selection is done automatically. Selected programme is displayed with “**HIGHLIGHTED**” characters.

Programme Number is between 00 and 99. Programme Name has a name string with 5 characters. After autostore process the Programme Names are set to:

- Channel search “**C01**” or “**S01**” (band and channel number), as default.

At the bottom of the menu there is a programme sort functions section. Each function is activated by a colour button. **NAME**, changes the programme name. **DELETE**, deletes undesired programmes. **INSERT**, inserts a programme into another programme’s position. By selecting **AUTOSTORE**, Autostore menu will be available.

NAME:

You can change the name of a selected programme by pressing the **RED** button (**NAME**). First letter of the selected programme is displayed with a highlighted character. To change that letter “▲” or “▼” button can be used, and to select the other letters, “◀” or “▶” button can be used.

After changing the name, press the **RED** button to store the new name or press the **BLUE** button to cancel.

INSERT:

When the **GREEN** button (**INSERT**) is pressed, “**NAME**”, “**AUTOSTORE**” and “**DELETE**” functions are erased and the selected programme is displayed with green characters. Use the navigation buttons to select another programme’s position. When the **GREEN** button is pressed again, the first selected programme will be inserted into the position of the current selection.

Press the **BLUE** button to cancel the activated “**INSERT**” process.

DELETE:

Press the **YELLOW** button to select a programme that you want to delete. When the **YELLOW** button is pressed again the selected programme will be deleted.

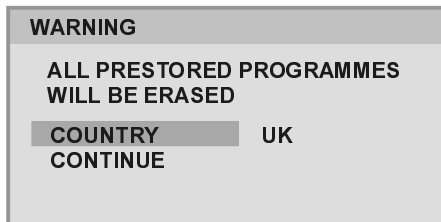
Pressing the **BLUE** button cancels the activated “**DELETE**” process.

AUTOSTORE:

(A.P.S. (Automatic Programming System))

A.P.S. searches and sorts all channels and stores them automatically on your TV, according to the transmission of programme systems in your area.

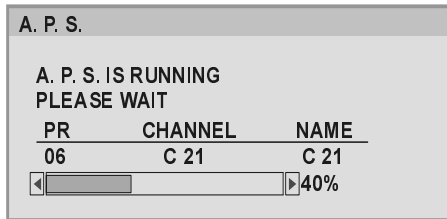
To enter Autostore menu, press the **BLUE** button.



- If you do not want to start **A.P.S.**, you can cancel it by pressing the Menu button on your remote control.

- First select your country by pressing “◀” or “▶” button. This will affect the sort process in APS.

- To select “**Continue**” use “▲” or “▼” button. By pressing “◀” or “▶” button start the **A.P.S.**
- When you start **A.P.S.** the following window will appear on the screen.



After APS is finalized, a programme list will appear on the screen. In the programme list you will see the programme numbers and names assigned to the programmes.

If you do not accept the locations and / or the programme names of programmes, you can change them in Programme menu.

Other Features

TV Status

Programme Number, **Programme Name** (or **EXT**), (they are displayed on the upper left of the screen). The **sound indicator** is displayed with them too. They are displayed after programme change for 3 seconds.

Sound Indicator

The alternatives of the indicator are Mono, Stereo, Dual I and Dual II. This indicator is displayed under the programme number indicator on the screen.

MONO

In Mono broadcast or in forced-mono (for stereo broadcast).

STEREO

In Stereo broadcast.

DUAL - I

If dual broadcast detected. Dual I is selected in default and also can be selected after Dual II by Remote Control.

DUAL - II

If Dual II is selected by Remote Control.

Hyper Sound

By pressing the “⊞” button on your remote control, Pseudo/Spatial effect can be turned on or off. In Mono transmission the left and right channels will be added at left channel and dummy stereo effect will be introduced to end-user.

In stereo transmission it yields a phase difference between left and right channels.

Mute Indicator

It is placed in the upper middle of the screen when enabled, and it stays there until it is disabled.



To cancel mute, there are two alternatives; the first one is by pressing the “⊞” button, this volume is set to the preceding value, and the second one is increasing or decreasing the volume level.

No-Signal Detection (TV mode)

If no valid signal is detected, it takes 5 minutes to switch to the Stand-By mode unless any signal detected or any Re-

mote Control command is accessed.

After a Remote Control command (if No-Signal Timer is active) the timer stops and if no signal detected again the timer is initialized to 5 minutes and starts 3 seconds later again to count down.

It is not valid in EXT modes.

Volume Bar

It is displayed in the lower middle of the screen. When a volume command is received (pressing “▲ +” or “▲ -” by Remote Control or Control panel at the right side of the TV) and no menu is active, it stays on the screen for 3 seconds, after the last volume command or until another command is received in between.



EXT Modes

By pressing the “**AV**” button you can switch your TV to EXT modes (except being in Teletext). Pressing this button consecutively will switch the TV in one of the optional EXT modes: **EXT1**, **EXT2**, **EXT2 S** and **EXT3**.

In order to quit the EXT mode press any digit buttons or “**P**✓” / “**P**^”.

Zoom Modes

Zoom mode can be changed by pressing the **ZOOM** button. You can change the screen size according to the picture aspect ratio. Select the optimum one from the following **ZOOM** modes.

AUTO, 4:3, 16:9

Picture

You can change **Picture Mode** settings by pressing “**PIC-TURE**” button when no menu appears.

VCR / DVD Control Buttons and VCR / / DVD Switch

The buttons can be used to operate a JVC brand VCR or DVD player. Pressing the button having the same appearance as the original remote control button of a device makes the function work in the same way as the original remote control.

1. Set the VCR /  / DVD Switch to the VCR or DVD position.


VCR:

When you are operating the VCR, set the switch to the VCR position.

DVD:

When you are operating the DVD player, set the switch to the DVD position.

(Text):

When you are viewing Teletext programmes, set the switch to the  (Text) position.

2. Press the VCR / DVD Control Button to control your VCR or DVD player.

Note:

- If your device is not made by JVC, these buttons cannot be used.
- Even if your device is made by JVC, some of these buttons or any one of the buttons may not work, depending on the device.

- You can use the \wedge / \vee buttons to choose a TV channel which the VCR will receive or choose the chapter which the DVD player plays back.
- Some DVD player models use the \wedge / \vee buttons for operating of Fast forward/backward functions and choosing the chapter. In this case, the \blacktriangleleft / \blacktriangleright the buttons do not work.




Teletext

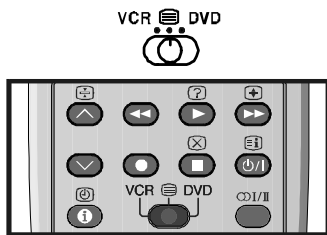
Teletext is an information system that displays text on your TV screen. Using the Teletext information system you can view a page of information on a subject that is available in the list of contents (index).

On screen display is not available in text mode.

Contrast, brightness or colour control is not available, but volume control is available in text mode.

To operate Teletext

- Select a TV station on which Teletext is being transmitted.
- Press (teletext) “” button. Usually the list of contents (index) is displayed on the screen.
- Set the VCR /  / DVD switch to the  (Text) position.

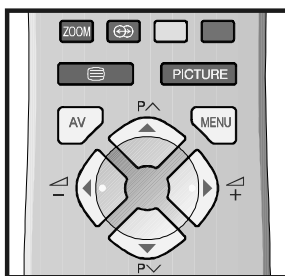


To select a page of Teletext


- Press the appropriate digit buttons for the required Teletext page number.

The selected page number is displayed at the top left corner of the screen. The Teletext page counter searches until the selected page number is located, so that the desired page is displayed on the screen.



- Press “**P** \wedge ” button to move the Teletext screen forward one page at a time.
- Press “**P** \vee ” button to move the Teletext screen backward one page at a time.





To Select Index Page




- To select the page number of the index (generally page 100), press “” button.

Searching for a teletext page while watching TV



- In the Teletext mode pressing “” button will switch the screen to the TV mode. In the TV mode enter a page number using digit buttons. As you enter last digit of page number, “” sign will replace the page number and flash until the entered page number is found. Then the page number will

replace “” sign again. Now you can display this teletext page by pressing “” button.

To Select Double Height Text



- Press “” button for the top half of the information page to be displayed in double height text.
- Press “” button again for the bottom half of the information page to be displayed in double height text.
- Press “” button once more for the full page of normal height text.

To Reveal “concealed” Information

- Pressing “” button once will reveal answers on a quiz or games page.
- Pressing “” button again will conceal the revealed answers.




To Stop Automatic Page Change

The teletext page you have selected may contain more information than what is on the screen; the rest of the information will be displayed after a period of time.

- Press “” button to stop the automatic page change.
- Press “” button again to allow the next page to be displayed.

To Select a Subcode Page

Subcode pages are subsections of long Teletext pages that can only be displayed on the screen one section at a time.

- Select the required Teletext page.
- Press “” button.
- Select the required subcode page number by pressing four digit buttons (e.g. 0001).
- If the selected subcode page is not displayed in a short time, press “” button. TV programme will be displayed on the screen.
- Teletext page number will be displayed on the upper left corner of the screen when the selected page is found.
- Press “” button to display the selected Teletext page.

To exit Teletext

- Press “” button. The screen will switch to TV mode.

Fastext and Toptext

Your TV supports the 7 page Teletext system. When the page number of any of the 7 pages in memory is entered, the system will not search for the requested page; instead it will display the page automatically.

- Press “**P** \wedge ” button to move the Teletext screen forward one page at a time.
- Press “**P** \vee ” button to move the Teletext screen backward one page at a time.

For Fastext and Toptext

The subject-heading for the information may have a particular colour.

- Press an appropriate **RED**, **GREEN**, **YELLOW** or **BLUE** button in order to reach the relevant page quickly.

For TOPTXT

If Toptext transmission is present, colour coded buttons will appear in status row.

If Toptext transmission is not present, status row will not appear.

In Toptext mode the “P^” or “P\” commands will request the next or previous page respectively. If Toptext transmission is not available, in case of operation of these commands, wrap-around occurs. For example page 100 appears to be one greater than page 199.

Toptext has a special page called HITLIST which can be displayed by pressing the “ED” button. Use colour buttons on HITLIST page to select a line which will link you to another teletext page.

Peripheral Equipment Connections

There is a wide range of audio and video equipment that can be connected to your TV.

Connection diagrams at the end of this section show you where the different equipment should be connected at the back side of the TV.

Via the Euroconnector

Your TV set has 2 Euroconnector sockets. If you want to connect peripherals (e.g. video, decoder, etc.) which have Euroconnectors, to your TV, use **EXT.1** or **EXT.2** input.

If an external device is connected via Euroconnector sockets, TV is switched to AV mode automatically. In this case if both sockets are connected, **SCART** has the precedence.

T-V LINK compatible VCR

Be sure to connect the T-V LINK compatible VCR to the **EXT.2** terminal. If not, the T-V LINK function will not work properly.

- When connecting a T-V LINK compatible VCR to the **EXT.2** terminal, be sure to connect the decoder to the VCR. If not, the **T-V LINK** function may not work properly. And then set the **Decoder(EXT2)** (see page 9) function for the channel to **ON** to unscramble a scrambled channel.

RGB mode

If an equipment can output the **RGB** signals, connect it to the **EXT.1** terminal.

EXT2S Mode

If the equipment connected to your TV set supports S-Video (Y/C) output from Euroconnector, you can have a better picture quality by selecting **EXT2S** mode and connecting your equipment to the **EXT.2 (EXT2S)** terminal of TV. See your equipment's booklet to check if your equipment has such feature.

Via the RCA jacks

If you have an equipment (such as a Camcorder) which has the RCA jacks, connect it to the **EXT-3** terminal with the video and audio cables.

Via the ANT (aerial) socket

If your equipment does not have an Euroconnector or RCA jacks, connect it to the TV with an aerial cable. For details, see the manual provided with the equipment.

- To store the test signal that comes from the equipment, see “Installation Menu” on page 8 and store it to the program

number 0. You can watch images from that equipment to select the program number which you stored the test signal.

Decoder

Cable TV offers you a wide choice of programmes. Some of them are free, others are to be paid for by the viewer. This means that you will need to subscribe to the broadcasting organisation whose programmes you wish to receive. This organisation will supply you a corresponding decoder unit to allow the programmes to be unscrambled.

For further information ask your dealer. See also the booklet supplied with your decoder.

Connect a decoder with an aerial socket to the TV

- Connect the aerial cable.

Connect a decoder without an aerial socket to the TV

- Connect the decoder to your TV with a eurocable (RCA Jack Cable) to **EXTERNAL** (RCA Jack). When your decoder has a Euroconnector / RCA Jack you can obtain better picture quality if you connect a eurocable (RCA Jack Cable) to **EXTERNAL** (RCA Jack).

TV and Video Recorder (VCR)

- Connect the Video Recorder to the ANT (antenna input) socket of the TV with the aerial cable.
- Connect the Video Recorder to the **EXT.1** or **EXT.2** terminal with the SCART cable.

NTSC Playback

Connect a NTSC video recorder to a terminal. Then press “AV” button to select the corresponding AV mode.

NTSC 3.58/4.43 system is detected automatically in AV mode.

Camera and Camcorder

To connect to the EXT-3 terminal

Connect your camera or camcorder to the right side of your TV.

- Connect your equipment to the TV via **VIDEO** (yellow), **AUDIO R** (red) and **AUDIO L** (white) inputs. You should connect the jacks to the input in the same colour.

Connect the decoder to the video recorder

Some video recorders have a special euroconnector for decoder.

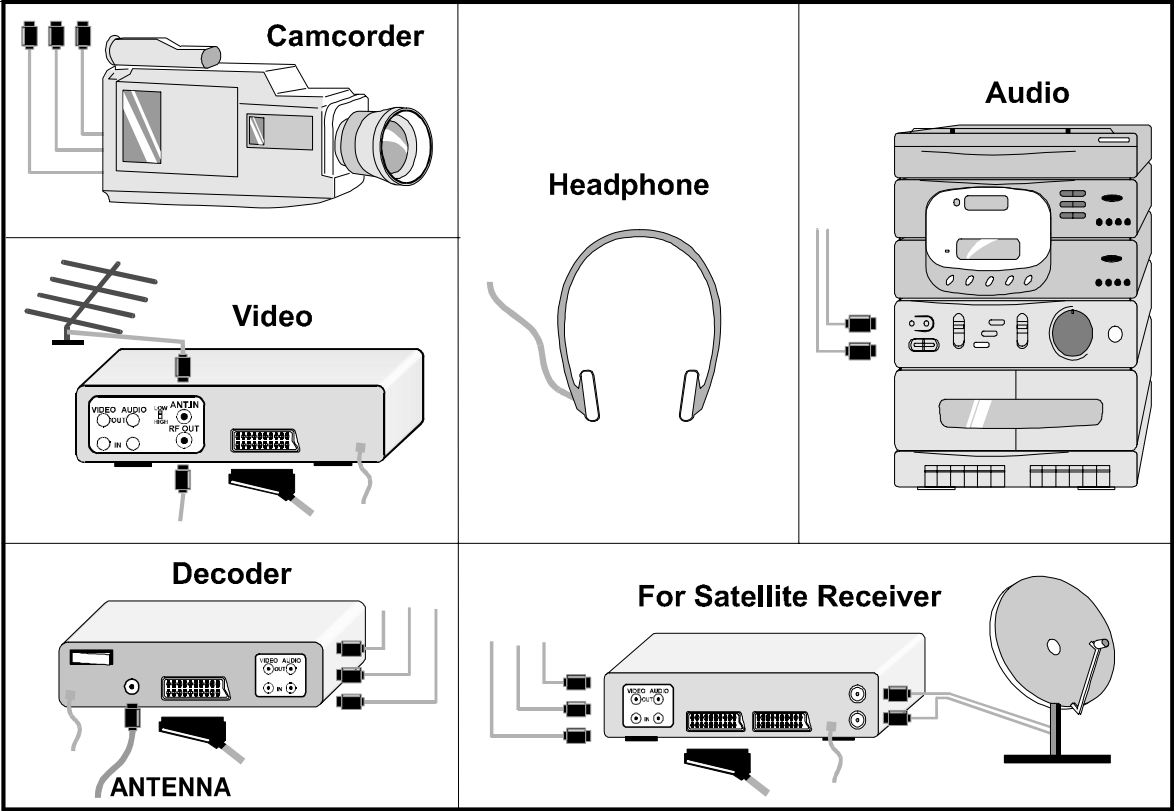
- Connect a eurocable to the euroconnector of your decoder and to the special euroconnector of your video recorder. See also the handbook of your video recorder.
- To connect your video recorder to the TV, see TV and Video Recorder section.

If you want to connect more equipment to your TV, consult your dealer.

Connecting Headphones

Use the stereo headphone socket of your TV, to connect headphones.

Peripheral Equipments



Tips

Can not turn the TV on?

Check that TV/VCR/DVD switch is set to TV position.

TV may go to stand-by mode when you turn the TV on soon after you turn the TV off. If you can turn the TV on again, it is not a problem.

Can not turn the TV off?

Check that TV/VCR/DVD switch is set to TV position.

Care of the Screen

Clean the screen with a slightly damp, soft cloth. Do not use abrasive solvents as they may damage the TV screen coating layer.

Colours of image on screen are abnormal

Have you selected the correct TV system? Is your TV set or house aerial located too close to the loudspeakers, non-earthed audio equipment or neon lights, etc. ?

Mountains or high buildings can cause double pictures or ghost images. Sometimes you can improve the picture quality by changing the direction of the aerial.

Is the picture or Teletext unrecognisable? Check if you have entered the correct frequency.

The picture quality may degrade when two peripherals are connected to the TV at the same time. In such a case, disconnect one of the peripherals.

No Image on Display Screen

Is the aerial connected properly? Are the plugs connected tightly to the aerial socket? Is the aerial cable damaged? Are suitable plugs used to connect the aerial? If you are in doubt, consult your dealer.

No Image means that your TV is not receiving any transmission. Have you pressed the correct buttons on the remote control? Try once more.

Sound

You can not hear any sound. Did you perhaps interrupt the sound, pressing "X" button? Are external speakers connected to the TV?

Sound is coming from only one of the speakers. Is the balance set to one direction extreme? See **Sound** menu.

Remote Control

If your TV no longer responds to the remote control, perhaps the batteries are exhausted. Replace the batteries.

Have you selected the wrong menu? Press "**MENU**" button to return to normal screen.

No solution

If the TV suddenly stops responding, disconnect the power cord of the TV from the AC outlet. Connect it to the AC outlet again to turn on the TV. If the TV returns to a normal state, it is not a failure. If this does not work, switch off, remove the mains plug and call the service personnel; never attempt to repair it yourself.

Specifications

Broadcasting System

PAL SECAM B/G D/K K' I/I' L/L'

Channels and Frequencies

Analogue: 46.25 MHz - 862.25 MHz (channel 01-17/21-73)

Cable TV: S1 - S41

Sound System

A2+Nicam Stereo

Power Requirements

220-240 V AC, 50 Hz

Power Consumption

130W (Standby < 3W)

Picture Tube Size

Viewable area 72cm .(measured diagonally)

Audio Output

2x10 W RMS (10% THD)

EXT.1 Terminal

Euroconnector (21-pin, SCART)

* Video Input, Audio L/R Inputs and RGB Inputs are available.

* Analogue TV broadcast output (Video and Audio L/R) are available.

EXT.2 Terminal

Euroconnector (21-pin, SCART)

* Video Input, S-VIDEO (Y/C) Input, Audio L/R Inputs are available.

* Video and Audio L/R outputs are available.

* T-V LINK functions are available.

EXT.3 Terminal

RCA connectors x 3

* Video Input and Audio Inputs are available.

Headphone jack

Stereo mini-jack (3.5 mm in diameter)

Dimensions (WxHxD)

785 mm x 615 mm x 500 mm

Accessories

Remote control unit x 1 (RM-C1512)

AA/R6 dry cell battery x 2

PARTS LIST

CAUTION

- The parts identified by the Δ symbol are important for the safety . Whenever replacing these parts, be sure to use specified ones to secure the safety.
- The parts not indicated in this Parts List and those which are filled with lines --- in the Parts No. columns will not be supplied.
- P.W. BOARD Ass'y will not be supplied, but those which are filled with the Parts No. in the Parts No. columns will be supplied.

ABBREVIATIONS OF RESISTORS, CAPACITORS AND TOLERANCES

RESISTORS		CAPACITORS	
CR	Carbon Resistor	C CAP.	Ceramic Capacitor
FR	Fusible Resistor	E CAP.	Electrolytic Capacitor
PR	Plate Resistor	M CAP.	Mylar Capacitor
VR	Variable Resistor	CH CAP.	Chip Capacitor
HV R	High Voltage Resistor	HV CAP.	High Voltage Capacitor
MF R	Metal Film Resistor	MF CAP.	Metalized Film Capacitor
MG R	Metal Glazed Resistor	MM CAP.	Metalized Mylar Capacitor
MP R	Metal Plate Resistor	MP CAP.	Metalized Polystyrol Capacitor
OM R	Metal Oxide Film Resistor	PP CAP.	Polypropylene Capacitor
CMF R	Coating Metal Film Resistor	PS CAP.	Polystyrol Capacitor
UNF R	Non-Flammable Resistor	TF CAP.	Thin Film Capacitor
CH V R	Chip Variable Resistor	MPP CAP.	Metalized Polypropylene Capacitor
CH MG R	Chip Metal Glazed Resistor	TAN. CAP.	Tantalum Capacitor
COMP. R	Composition Resistor	CH C CAP.	Chip Ceramic Capacitor
LPTC R	Linear Positive Temperature Coefficient Resistor	BP E CAP.	Bi-Polar Electrolytic Capacitor
		CH AL E CAP.	Chip Aluminum Electrolytic Capacitor
		CH AL BP CAP.	Chip Aluminum Bi-Polar Capacitor
		CH TAN. E CAP.	Chip Tantalum Electrolytic Capacitor
		CH AL BP E CAP.	Chip Tantalum Bi-Polar Electrolytic Capacitor

RESISTORS									
F	G	J	K	M	N	R	H	Z	P
$\pm 1\%$	$\pm 2\%$	$\pm 5\%$	$\pm 10\%$	$\pm 20\%$	$\pm 30\%$	+30% -10%	+50% -10%	+80% -20%	+100% -0%

CONTENTS

USING P.W. BOARD & REMOTE CONTROL UNIT	3-2
EXPLODED VIEW PARTS LIST -1	3-3
EXPLODED VIEW -1	3-4
EXPLODED VIEW -2	3-5
 PRINTED WIRING BOARD PARTS LIST	 3-6
MAIN P.W. BOARD ASS'Y (VE-20265029)	3-6
CRT SOCKET P.W. BOARD ASS'Y (VE-20247134)	3-9
SIDE CONTROL P.W. BOARD ASS'Y (VE-20166350)	3-10
AV & HEADPHONE P.W. BOARD ASS'Y (VE-20226778)	3-10
LED P.W. BOARD ASS'Y (VE-20167316)	3-10
POWER SW P.W. BOARD ASS'Y (VE-20209386)	3-10
 PACKING	 3-11
PACKING PARTS LIST	3-11

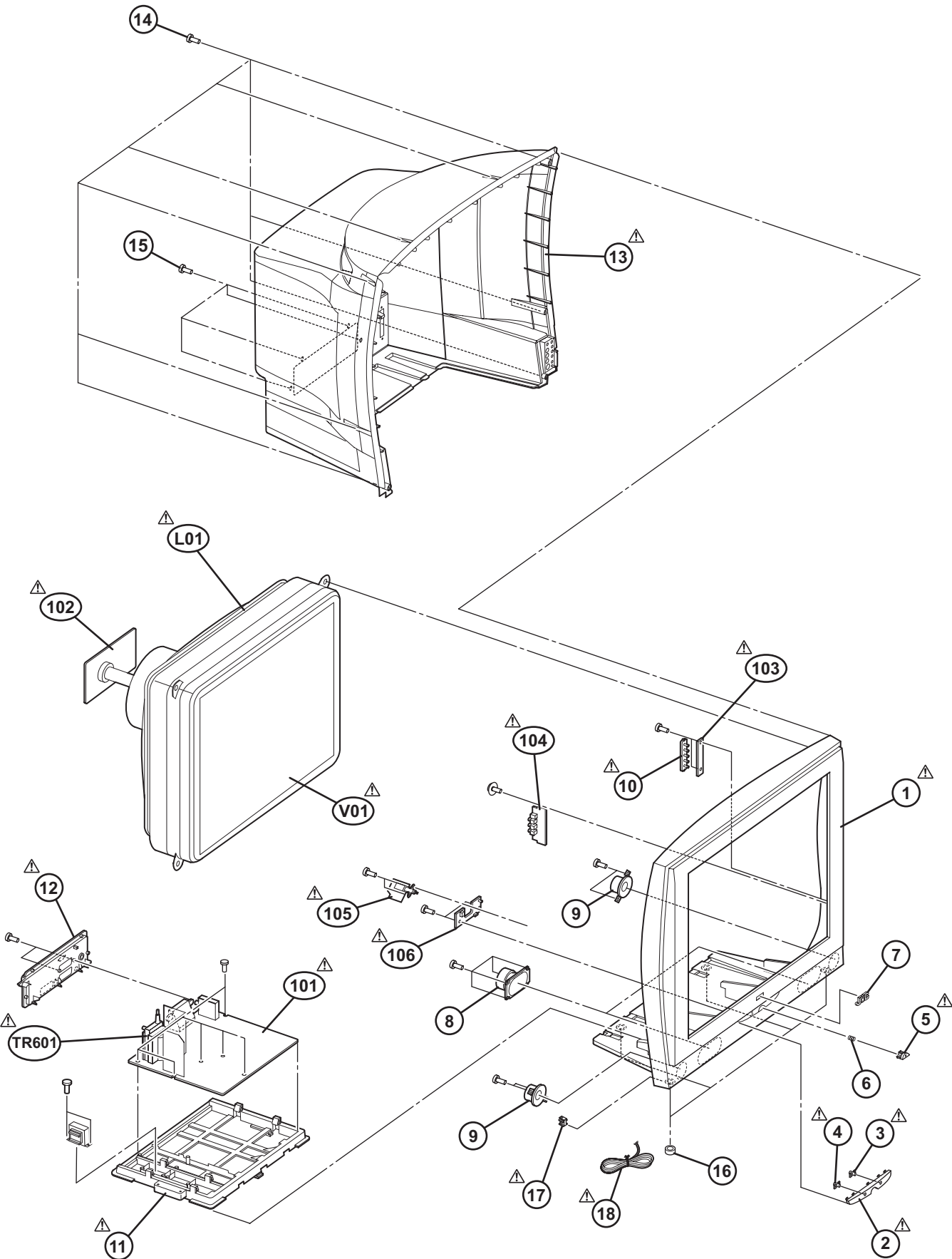
USING P.W. BOARD & REMOTE CONTROL UNIT

P.W.B ASS'Y name	P.W.B ASS'Y No.
MAIN P.W.B	VE-20265029
CRT SOCKET P.W.B	VE-20247134
SIDE CONTROL P.W.B	VE-20166350
AV & HEADPHONE P.W.B	VE-20226778
LED P.W.B	VE-20167316
POWER SW P.W.B	VE-20209386
REMOTE CONTROL UNIT	VE-30021287

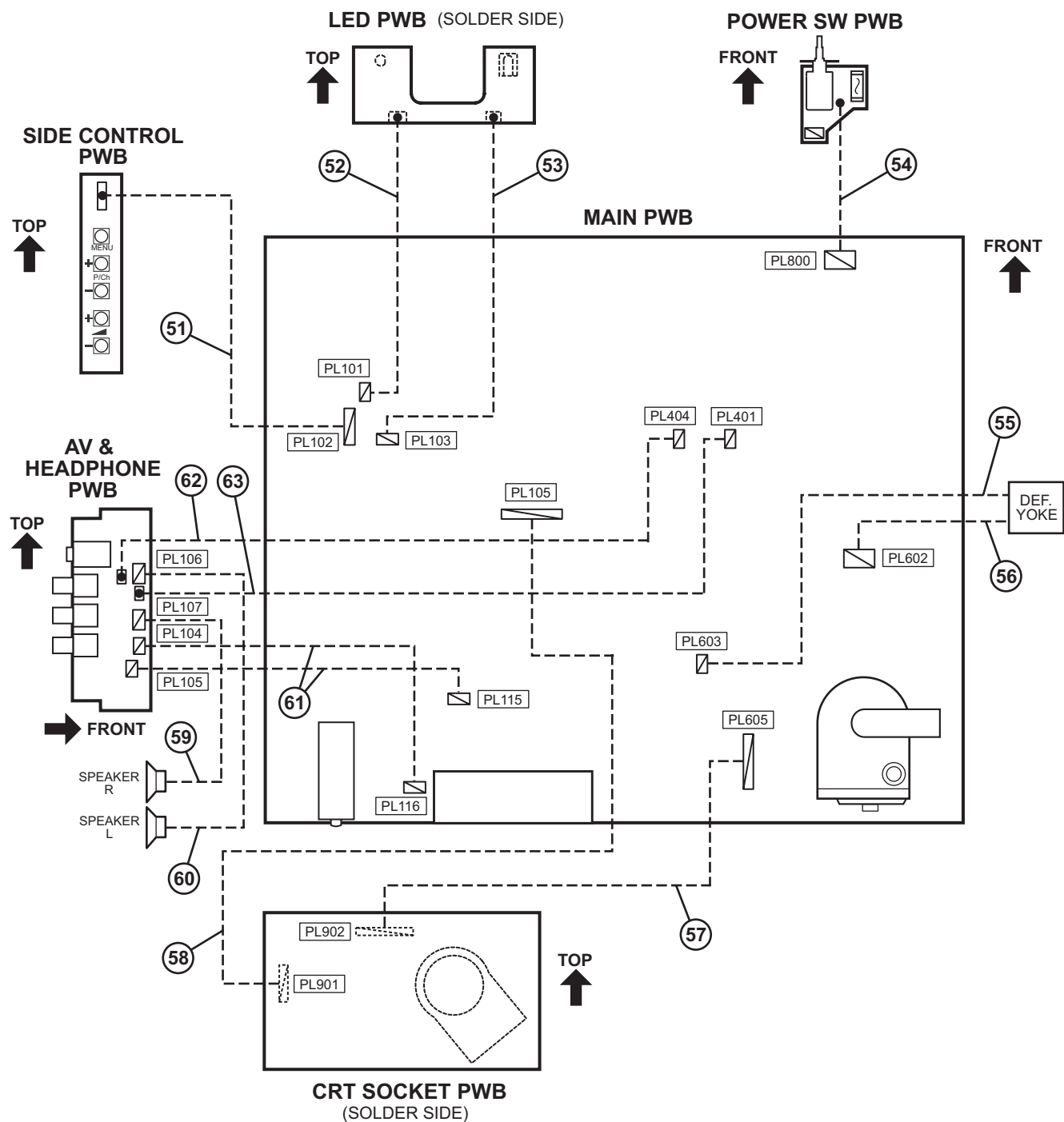
EXPLODED VIEW PARTS LIST -1

△	Ref.No.	Part No.	Part Name	Description	Local
△	V01	VE-TH0021X101	PICTURE TUBE		
△	L01	VE-30042103	DEG. COIL & EARTH		
△	TR601	VE-30037592	FB TRANSF.		
△	1	VE-20161157	FRONT CABINET		
△	2	VE-20166395	LENS		
△	3	VE-20153568	LENS (LED)		
△	4	VE-20153721	LENS (IR SENSOR)		
△	5	VE-20161162	ON/OFF BUTTON	POWER	
	6	VE-35000020	SPRING (ON/OFF SWITCH)		
	7	VE-40021572	JVC LOGO		
	8	VE-30024903	SPEAKER	8ohm 15W 57x126mm(x2)	
	9	VE-30024912	TWEETER	8ohm 8W 51mm	
△	10	VE-20161160	FUNCTION BUTTON		
△	11	VE-40026402	CHASSIS FRAME		
△	12	VE-40024096	BACK DOOR		
△	13	VE-20170313	REAR COVER		
	14	VE-35011401	SCREW	(M4x18.5) For REAR COVER(x8)	
	15	VE-35000212	SCREW	(M2.9x13) For BACK DOOR(x4)	
	16	VE-40000082	RUBBER FOOT	(x4)	
△	17	VE-40024076	CABLE HOLDER		
△	18	VE-30016513	POWER CORD	2.2m	
	51	VE-30032688	E-HARNESS ASSY	MAIN PL102 - SIDE CONTROL PWB	
	52	VE-30038428	E-HARNESS ASSY	MAIN PL101 - LED PWB	
	53	VE-30038429	E-HARNESS ASSY	MAIN PL103 - LED PWB	
	54	VE-30032691	E-HARNESS ASSY	MAIN PL800 - POWER SW PWB	
	55	VE-30019083	E-HARNESS ASSY	MAIN PL603 - DEF YOKE	
	56	VE-30032963	E-HARNESS ASSY	MAIN PL602 - DEF YOKE	
	57	VE-30028075	E-HARNESS ASSY	MAIN PL605 - CRT PL902	
	58	VE-30028074	E-HARNESS ASSY	MAIN PL105 - CRT PL901	
	59	VE-30013905	E-HARNESS ASSY	AV&HP PL107 - SPEAKER (RIGHT)	
	60	VE-30012634	E-HARNESS ASSY	AV&HP PL106 - SPEAKER (LEFT)	
	61	VE-30042967	E-HARNESS ASSY	MAIN PL115+PL116 - AV&HP PL104+PL105	
	62	VE-30016864	E-HARNESS ASSY	MAIN PL404 - AV&HP PWB	
	63	VE-30016865	E-HARNESS ASSY	MAIN PL401 - AV&HP PWB	
△	101	VE-20265029	MAIN PWB		
△	102	VE-20247134	CRT SOCKET PWB		
△	103	VE-20166350	SIDE CONTROL PWB		
△	104	VE-20226778	AV & HEADPHONE PWB		
△	105	VE-20209386	POWER SW PWB		
△	106	VE-20167316	LED PWB		

EXPLODED VIEW -1



EXPLODED VIEW -2



PRINTED WIRING BOARD PARTS LIST

MAIN P.W. BOARD ASS'Y (VE-20265029)

△Ref No.	Part No.	Part Name	Description	Local	△Ref No.	Part No.	Part Name	Description	Local
IC100	VE-30029324	IC	(SERVICE)		D609	VE-30001318	DIODE		
IC101	VE-20265033	IC			D610	VE-30001288	DIODE		
IC400	VE-30027557	IC			D611	VE-30001318	DIODE		
IC403	VE-30038486	IC			D612	VE-30001318	DIODE		
IC600	VE-30001665	IC			D613	VE-30001318	DIODE		
IC601	VE-30013612	IC			D614	VE-30038472	Z DIODE		
IC800	VE-30001668	IC			D616	VE-30001285	DIODE		
IC801	VE-30001668	IC			D618	VE-30038504	DIODE		
IC802	VE-30001384	TRANSISTOR			D620	VE-30038472	Z DIODE		
△IC803	VE-30001270	PTC			D622	VE-30001285	DIODE		
IC804	VE-30031947	IC			D800	VE-20108354	DIODE		
△IC805	VE-30015087	IC			D801	VE-30001329	DIODE		
IC806	VE-30031524	IC			D802	VE-30001318	DIODE		
					D805	VE-30001318	DIODE		
					D806	VE-30001318	DIODE		
					D808	VE-30001288	DIODE		
Q100	VE-30029775	TRANSISTOR			D809	VE-30001288	DIODE		
Q101	VE-30001457	TRANSISTOR			D810	VE-30038472	Z DIODE		
Q102	VE-30029775	TRANSISTOR			D811	VE-30001318	DIODE		
Q103	VE-30029775	TRANSISTOR			D813	VE-30001285	DIODE		
Q104	VE-30001458	TRANSISTOR			D814	VE-30001343	DIODE		
Q106	VE-30001452	TRANSISTOR			D815	VE-30001285	DIODE		
Q107	VE-30029322	TRANSISTOR			D816	VE-30001323	DIODE		
Q108	VE-30001457	TRANSISTOR			D817	VE-30034072	DIODE		
Q109	VE-30024724	TRANSISTOR			D818	VE-30009366	DIODE		
Q110	VE-30001457	TRANSISTOR			D819	VE-30001288	DIODE		
Q113	VE-30001452	TRANSISTOR			D820	VE-30009366	DIODE		
Q114	VE-30001457	TRANSISTOR			D822	VE-30001318	DIODE		
Q115	VE-30001458	TRANSISTOR			D823	VE-30001329	DIODE		
Q116	VE-30001457	TRANSISTOR			D827	VE-30038478	DIODE		
Q117	VE-30001458	TRANSISTOR							
Q118	VE-30001457	TRANSISTOR			C100	VE-30016654	CAPACITOR	100nF 16V K	
Q119	VE-30001457	TRANSISTOR			C101	VE-30000371	E CAPACITOR	22uF 50V M	
Q121	VE-30001458	TRANSISTOR			C107	VE-30016654	CAPACITOR	100nF 16V K	
Q122	VE-30001457	TRANSISTOR			C108	VE-30016654	CAPACITOR	100nF 16V K	
Q401	VE-30001458	TRANSISTOR			C114	VE-30000345	E CAPACITOR	10uF 50V M	
Q402	VE-30001457	TRANSISTOR			C115	VE-30012586	CAPACITOR	22nF 50V K	
Q403	VE-30001458	TRANSISTOR			C116	VE-30016126	CAPACITOR	220nF 16V K	
Q600	VE-30001441	TRANSISTOR			C117	VE-30016654	CAPACITOR	100nF 16V K	
Q601	VE-30031823	TRANSISTOR			C119	VE-30000371	E CAPACITOR	22uF 50V M	
Q602	VE-30007799	TRANSISTOR			C120	VE-30016654	CAPACITOR	100nF 16V K	
Q603	VE-30001457	TRANSISTOR			C121	VE-30016126	CAPACITOR	220nF 16V K	
Q604	VE-30001458	TRANSISTOR			C122	VE-30016126	CAPACITOR	220nF 16V K	
Q605	VE-30001426	TRANSISTOR			C126	VE-30016126	CAPACITOR	220nF 16V K	
Q607	VE-30001458	TRANSISTOR			C127	VE-30000345	E CAPACITOR	10uF 50V M	
Q608	VE-30001458	TRANSISTOR			C128	VE-30000345	E CAPACITOR	10uF 50V M	
Q801	VE-30001457	TRANSISTOR			C129	VE-30016654	CAPACITOR	100nF 16V K	
Q802	VE-30001386	TRANSISTOR			C130	VE-30016654	CAPACITOR	100nF 16V K	
Q805	VE-30001454	TRANSISTOR			C131	VE-30016126	CAPACITOR	220nF 16V K	
Q806	VE-30001426	TRANSISTOR			C132	VE-30012610	CAPACITOR	10nF 50V J	
Q807	VE-30001457	TRANSISTOR			C133	VE-30016126	CAPACITOR	220nF 16V K	
Q808	VE-30001457	TRANSISTOR			C134	VE-30016126	CAPACITOR	220nF 16V K	
Q809	VE-30001457	TRANSISTOR			C135	VE-30000352	E CAPACITOR	100uF 16V M	
Q810	VE-30001454	TRANSISTOR			C136	VE-30016126	CAPACITOR	220nF 16V K	
Q811	VE-30001454	TRANSISTOR			C137	VE-30000352	E CAPACITOR	100uF 16V M	
Q812	VE-30001457	TRANSISTOR			C138	VE-30000352	E CAPACITOR	100uF 16V M	
Q813	VE-30001458	TRANSISTOR			C139	VE-30016654	CAPACITOR	100nF 16V K	
					C140	VE-30016126	CAPACITOR	220nF 16V K	
D100	VE-30038493	DIODE			C141	VE-30016126	CAPACITOR	220nF 16V K	
D101	VE-30001285	DIODE			C142	VE-30016126	CAPACITOR	220nF 16V K	
D102	VE-30001285	DIODE			C143	VE-30012609	CAPACITOR	68nF 50V K	
D103	VE-30038493	DIODE			C144	VE-30016654	CAPACITOR	100nF 16V K	
D104	VE-30012411	DIODE			C145	VE-30000352	E CAPACITOR	100uF 16V M	
D105	VE-30001285	DIODE			C146	VE-30012610	CAPACITOR	10nF 50V J	
D108	VE-30038472	Z DIODE			C147	VE-30000345	E CAPACITOR	10uF 50V M	
D111	VE-30038472	Z DIODE			C148	VE-30016654	CAPACITOR	100nF 16V K	
D112	VE-30038472	Z DIODE			C151	VE-30012617	CAPACITOR	6.8nF 50V M	
D113	VE-30036987	DIODE			C152	VE-30012585	CAPACITOR	2.2nF 50V K	
D114	VE-30036988	DIODE			C153	VE-30000352	E CAPACITOR	100uF 16V M	
D115	VE-30036988	DIODE			C154	VE-30012577	CAPACITOR	560pF 50V J	
D116	VE-30036987	DIODE			C155	VE-30000345	E CAPACITOR	10uF 50V M	
D117	VE-30036987	DIODE			C156	VE-30016654	CAPACITOR	100nF 16V K	
D118	VE-30036988	DIODE			C157	VE-30016126	CAPACITOR	220nF 16V K	
D119	VE-30036988	DIODE			C158	VE-30000352	E CAPACITOR	100uF 16V M	
D120	VE-30036988	DIODE			C161	VE-30012610	CAPACITOR	10nF 50V J	
D121	VE-30012669	RESISTOR	1/16W 22K J		C162	VE-30000396	E CAPACITOR	47uF 16V M	
D155	VE-30038497	DIODE			C163	VE-30000362	E CAPACITOR	1uF 50V M	
D403	VE-30001285	DIODE			C164	VE-30012586	CAPACITOR	22nF 50V K	
D600	VE-30038475	DIODE			C165	VE-30016126	CAPACITOR	220nF 16V K	
D601	VE-30001285	DIODE			C166	VE-30000345	E CAPACITOR	10uF 50V M	
D602	VE-30001285	DIODE			C167	VE-30012581	CAPACITOR	1nF 50V K	
D603	VE-30001285	DIODE			C168	VE-30012581	CAPACITOR	1nF 50V K	
D604	VE-30001320	DIODE			C169	VE-30000083	CAPACITOR	150nF 63V J	
D605	VE-30007681	DIODE			C170	VE-30016654	CAPACITOR	100nF 16V K	
D606	VE-30001318	DIODE			C171	VE-30016654	CAPACITOR	100nF 16V K	
D607	VE-30038476	Z DIODE			C172	VE-30016654	CAPACITOR	100nF 16V K	
D608	VE-30038492	Z DIODE			C173	VE-30016654	CAPACITOR	100nF 16V K	

△Ref No.	Part No.	Part Name	Description Local	△Ref No.	Part No.	Part Name	Description Local
C174	VE-30016654	CAPACITOR	100nF 16V K	C432	VE-30000296	C CAPACITOR	100nF 100V Z
C175	VE-30016654	CAPACITOR	100nF 16V K	C433	VE-30000109	CAPACITOR	470nF 63V J
C176	VE-30016654	CAPACITOR	100nF 16V K	C439	VE-30012567	CAPACITOR	220pF 50V J
C178	VE-30012610	CAPACITOR	10nF 50V J	C440	VE-30000109	CAPACITOR	470nF 63V J
C179	VE-30016126	CAPACITOR	220nF 16V K	C441	VE-30000296	C CAPACITOR	100nF 100V Z
C180	VE-30012610	CAPACITOR	10nF 50V J	C449	VE-30000352	E CAPACITOR	100uF 16V M
C181	VE-30012603	CAPACITOR	100nF 25V K	C450	VE-30016654	CAPACITOR	100nF 16V K
C182	VE-30016654	CAPACITOR	100nF 16V K	C600	VE-30000400	E CAPACITOR	47uF 50V M
C183	VE-30024768	CAPACITOR	470nF 16V Z	C601	VE-30000353	E CAPACITOR	100uF 25V M
C184	VE-30024768	CAPACITOR	470nF 16V Z	C602	VE-30016654	CAPACITOR	100nF 16V K
C185	VE-30016654	CAPACITOR	100nF 16V K	C603	VE-30000400	E CAPACITOR	47uF 50V M
C186	VE-30016654	CAPACITOR	100nF 16V K	C604	VE-30000407	E CAPACITOR	470uF 16V M
C187	VE-30000345	E CAPACITOR	10uF 50V M	C605	VE-30000074	CAPACITOR	100nF 63V J
C189	VE-30012587	CAPACITOR	3.3nF 50V K	C606	VE-30000090	CAPACITOR	22nF 100V J
C190	VE-30024768	CAPACITOR	470nF 16V Z	C607	VE-30023449	CAPACITOR	4.7nF 2000VDC J
C191	VE-30016654	CAPACITOR	100nF 16V K	C608	VE-30023480	CAPACITOR	10nF 2000VDC
C192	VE-30000413	E CAPACITOR	4.7uF 50V M	C609	VE-30000107	CAPACITOR	47nF 250V J
C193	VE-30016654	CAPACITOR	100nF 16V K	C610	VE-30000346	E CAPACITOR	10uF 100V M
C194	VE-30024768	CAPACITOR	470nF 16V Z	△C611	VE-30000119	CAPACITOR	12nF 630VDC J
C195	VE-30000384	E CAPACITOR	2.2uF 50V M	C612	VE-30000296	C CAPACITOR	100nF 100V Z
C196	VE-30000384	E CAPACITOR	2.2uF 50V M	△C613	VE-30000172	CAPACITOR	680nF 250V J
C197	VE-30000384	E CAPACITOR	2.2uF 50V M	C615	VE-30000124	CAPACITOR	620nF 250V
C199	VE-30000384	E CAPACITOR	2.2uF 50V M	C616	VE-30000374	E CAPACITOR	22uF 250V M
C200	VE-30016654	CAPACITOR	100nF 16V K	C617	VE-30000433	C CAPACITOR	1nF 1KV M
C201	VE-30016654	CAPACITOR	100nF 16V K	C618	VE-30012590	CAPACITOR	47nF 50V K
C203	VE-30012610	CAPACITOR	10nF 50V J	C619	VE-30000296	C CAPACITOR	100nF 100V Z
C204	VE-30000345	E CAPACITOR	10uF 50V M	C620	VE-30000391	E CAPACITOR	330uF 63V M
C205	VE-30000345	E CAPACITOR	10uF 50V M	C621	VE-30012590	CAPACITOR	47nF 50V K
C206	VE-30024768	CAPACITOR	470nF 16V Z	C622	VE-30000296	C CAPACITOR	100nF 100V Z
C207	VE-30016654	CAPACITOR	100nF 16V K	C623	VE-30012590	CAPACITOR	47nF 50V K
C208	VE-30024768	CAPACITOR	470nF 16V Z	C624	VE-30000444	C CAPACITOR	470pF 1KV K
C210	VE-30000384	E CAPACITOR	2.2uF 50V M	C625	VE-30000409	E CAPACITOR	470uF 25V
C211	VE-30000384	E CAPACITOR	2.2uF 50V M	C626	VE-30000400	E CAPACITOR	47uF 50V M
C212	VE-30016654	CAPACITOR	100nF 16V K	C627	VE-30000350	E CAPACITOR	10uF 250V M
C213	VE-30000352	E CAPACITOR	100uF 16V M	C629	VE-30000406	E CAPACITOR	47uF 250V M
C222	VE-30012581	CAPACITOR	1nF 50V K	C630	VE-30000346	E CAPACITOR	10uF 100V M
C223	VE-30012581	CAPACITOR	1nF 50V K	C631	VE-30012590	CAPACITOR	47nF 50V K
C236	VE-30012581	CAPACITOR	1nF 50V K	C633	VE-30000296	C CAPACITOR	100nF 100V Z
C237	VE-30012581	CAPACITOR	1nF 50V K	C634	VE-30000283	C CAPACITOR	1nF 50V K
C238	VE-30012589	CAPACITOR	4.7nF 50V K	C636	VE-30000092	CAPACITOR	220nF 63V J
C239	VE-30012603	CAPACITOR	100nF 25V K	C637	VE-30000100	CAPACITOR	330nF 63V J
C240	VE-30012566	CAPACITOR	22pF 50V J	C638	VE-30012567	CAPACITOR	220pF 50V J
C241	VE-30012566	CAPACITOR	22pF 50V J	C639	VE-30000345	E CAPACITOR	10uF 50V M
C242	VE-30012566	CAPACITOR	22pF 50V J	C640	VE-30012590	CAPACITOR	47nF 50V K
C243	VE-30012566	CAPACITOR	22pF 50V J	△C641	VE-30019702	CAPACITOR	1.2uF 250V J
C244	VE-30012607	CAPACITOR	150pF 50V J	C642	VE-30016654	CAPACITOR	100nF 16V K
C245	VE-30012573	CAPACITOR	47pF 50V J	C800	VE-30000433	C CAPACITOR	1nF 1KV M
C250	VE-30012589	CAPACITOR	4.7nF 50V K	△C801	VE-30000084	CAPACITOR	150nF 275V M
C251	VE-30012589	CAPACITOR	4.7nF 50V K	△C802	VE-30000094	CAPACITOR	220nF 275V M
C252	VE-30012589	CAPACITOR	4.7nF 50V K	△C807	VE-30000161	CAPACITOR	47nF 630VDC J
C253	VE-30012581	CAPACITOR	1nF 50V K	C808	VE-30000393	E CAPACITOR	3.3uF 50V M
C254	VE-30012581	CAPACITOR	1nF 50V K	C810	VE-30000421	E CAPACITOR	220uF 400V M
C256	VE-30012566	CAPACITOR	22pF 50V J	C811	VE-30000319	C CAPACITOR	2.7nF 500V K
C257	VE-30012603	CAPACITOR	100nF 25V K	C813	VE-30000387	E CAPACITOR	33uF 50V M
C259	VE-30012607	CAPACITOR	150pF 50V J	△C814	VE-30000161	CAPACITOR	47nF 630VDC J
C260	VE-30012566	CAPACITOR	22pF 50V J	C815	VE-30007308	C CAPACITOR	220pF 1KV K
C272	VE-30012607	CAPACITOR	150pF 50V J	C818	VE-30009208	C CAPACITOR	470pF 1KV K
C273	VE-30012581	CAPACITOR	1nF 50V K	△C819	VE-30000440	C CAPACITOR	2.2nF 4KV M
C274	VE-30012581	CAPACITOR	1nF 50V K	△C820	VE-30000440	C CAPACITOR	2.2nF 4KV M
C278	VE-30000396	E CAPACITOR	47uF 16V M	C822	VE-30000330	C CAPACITOR	4.7nF 50V K
C279	VE-30000396	E CAPACITOR	47uF 16V M	C825	VE-30012567	CAPACITOR	220pF 50V J
C280	VE-30000396	E CAPACITOR	47uF 16V M	C826	VE-30007708	C CAPACITOR	1nF 1KV K
C281	VE-30000352	E CAPACITOR	100uF 16V M	C827	VE-30000406	E CAPACITOR	47uF 250V M
C283	VE-30000400	E CAPACITOR	47uF 50V M	C828	VE-30000436	C CAPACITOR	10nF 1KV Z
C400	VE-30012580	CAPACITOR	820pF 50V J	C829	VE-30006753	C CAPACITOR	220pF 1KV K
C401	VE-30012577	CAPACITOR	560pF 50V J	C830	VE-30006753	C CAPACITOR	220pF 1KV K
C402	VE-30012581	CAPACITOR	1nF 50V K	C831	VE-30012603	CAPACITOR	100nF 25V K
C403	VE-30000392	E CAPACITOR	0.33uF 50V M	C832	VE-30012603	CAPACITOR	100nF 25V K
C404	VE-30012581	CAPACITOR	1nF 50V K	C833	VE-30012603	CAPACITOR	100nF 25V K
C405	VE-30012577	CAPACITOR	560pF 50V J	C834	VE-30016654	CAPACITOR	100nF 16V K
C406	VE-30012590	CAPACITOR	47nF 50V K	C836	VE-30016654	CAPACITOR	100nF 16V K
C407	VE-30000371	E CAPACITOR	22uF 50V M	C839	VE-30016654	CAPACITOR	100nF 16V K
C408	VE-30012577	CAPACITOR	560pF 50V J	C840	VE-30000400	E CAPACITOR	47uF 50V M
C409	VE-30012577	CAPACITOR	560pF 50V J	C841	VE-30000383	E CAPACITOR	2200uF 25V M
C410	VE-30000371	E CAPACITOR	22uF 50V M	C842	VE-30000383	E CAPACITOR	2200uF 25V M
C411	VE-30012590	CAPACITOR	47nF 50V K	C843	VE-30000360	E CAPACITOR	1000uF 25V M
C412	VE-30012609	CAPACITOR	68nF 50V K	C844	VE-30000383	E CAPACITOR	2200uF 25V M
C413	VE-30007082	CAPACITOR	680nF 63V J	C845	VE-30000382	E CAPACITOR	2200uF 16V M
C414	VE-30007179	E CAPACITOR	33uF 100V M	C847	VE-30000367	E CAPACITOR	1uF 250V M
C415	VE-30000409	E CAPACITOR	470uF 25V	C848	VE-30016654	CAPACITOR	100nF 16V K
C416	VE-30000409	E CAPACITOR	470uF 25V	C849	VE-30000283	C CAPACITOR	1nF 50V K
C417	VE-30012581	CAPACITOR	1nF 50V K	C850	VE-30012581	CAPACITOR	1nF 50V K
C418	VE-30012581	CAPACITOR	1nF 50V K	C851	VE-30016654	CAPACITOR	100nF 16V K
C419	VE-30000392	E CAPACITOR	0.33uF 50V M	C852	VE-30016654	CAPACITOR	100nF 16V K
C420	VE-30012580	CAPACITOR	820pF 50V J	C853	VE-30016654	CAPACITOR	100nF 16V K
C427	VE-30000296	C CAPACITOR	100nF 100V Z	C854	VE-30000362	E CAPACITOR	1uF 50V M
C428	VE-30012603	CAPACITOR	100nF 25V K	C855	VE-30031826	E CAPACITOR	4700uF 6.3V M
C429	VE-30007082	CAPACITOR	680nF 63V J	C856	VE-30016654	CAPACITOR	100nF 16V K
C430	VE-30012603	CAPACITOR	100nF 25V K	C857	VE-30031825	E CAPACITOR	2200uF 6.3V M
C431	VE-30012609	CAPACITOR	68nF 50V K	C859	VE-30000352	E CAPACITOR	100uF 16V M

△Ref No.	Part No.	Part Name	Description Local	△Ref No.	Part No.	Part Name	Description Local
C862	VE-30012642	RESISTOR	1/16W 120K J	R235	VE-30012641	RESISTOR	1/16W 10K J
R100	VE-30000583	RESISTOR	1/4W 220R	R236	VE-30000471	RESISTOR	1/4W 10K J
R101	VE-30000626	RESISTOR	1/10W 270R J	R237	VE-30000471	RESISTOR	1/4W 10K J
R102	VE-30012677	RESISTOR	1/16W 3.3K J	R238	VE-30012641	RESISTOR	1/16W 10K J
R103	VE-30000459	RESISTOR	1/4W 100R J	R240	VE-30012641	RESISTOR	1/16W 10K J
R104	VE-30012692	RESISTOR	1/16W 4.7K J	R241	VE-30012641	RESISTOR	1/16W 10K J
R105	VE-30012510	RESISTOR	1/16W 100R J	R242	VE-30012510	RESISTOR	1/16W 100R J
R106	VE-30012692	RESISTOR	1/16W 4.7K J	R244	VE-30012702	RESISTOR	1/16W 560R J
R107	VE-30012692	RESISTOR	1/16W 4.7K J	R245	VE-30000459	RESISTOR	1/4W 100R J
R108	VE-30012510	RESISTOR	1/16W 100R J	R246	VE-30012510	RESISTOR	1/16W 100R J
R111	VE-30000459	RESISTOR	1/4W 100R J	R247	VE-30012982	RESISTOR	1/16W 10R J
R112	VE-30000459	RESISTOR	1/4W 100R J	R248	VE-30012657	RESISTOR	1/16W 1K J
R113	VE-30012677	RESISTOR	1/16W 3.3K J	R249	VE-30012509	RESISTOR	1/16W 100K J
R114	VE-30012641	RESISTOR	1/16W 10K J	R250	VE-30014078	RESISTOR	1/16W 22R J
R115	VE-30012668	RESISTOR	1/16W 220R J	R251	VE-30012713	RESISTOR	1/16W 75R J
R116	VE-30012657	RESISTOR	1/16W 1K J	R252	VE-30012668	RESISTOR	1/16W 220R J
R117	VE-30012655	RESISTOR	1/16W 180R J	R265	VE-30012684	RESISTOR	1/16W 330R J
R118	VE-30012677	RESISTOR	1/16W 3.3K J	R266	VE-30012684	RESISTOR	1/16W 330R J
R119	VE-30012677	RESISTOR	1/16W 3.3K J	R267	VE-30012713	RESISTOR	1/16W 75R J
R126	VE-30012669	RESISTOR	1/16W 22K J	R268	VE-30012677	RESISTOR	1/16W 3.3K J
R127	VE-30012648	RESISTOR	1/16W 150K J	R269	VE-30012510	RESISTOR	1/16W 100R J
R128	VE-30012692	RESISTOR	1/16W 4.7K J	R270	VE-30012510	RESISTOR	1/16W 100R J
R129	VE-30012695	RESISTOR	1/16W 470R J	R271	VE-30012510	RESISTOR	1/16W 100R J
R132	VE-30012657	RESISTOR	1/16W 1K J	R272	VE-30000471	RESISTOR	1/4W 10K J
R133	VE-30012659	RESISTOR	1/16W 2.2K J	R273	VE-30012713	RESISTOR	1/16W 75R J
R137	VE-30012510	RESISTOR	1/16W 100R J	R274	VE-30012713	RESISTOR	1/16W 75R J
R138	VE-30000459	RESISTOR	1/4W 100R J	R275	VE-30014078	RESISTOR	1/16W 22R J
R139	VE-30000459	RESISTOR	1/4W 100R J	R276	VE-30012657	RESISTOR	1/16W 1K J
R141	VE-30000459	RESISTOR	1/4W 100R J	R277	VE-30012510	RESISTOR	1/16W 100R J
R142	VE-30000459	RESISTOR	1/4W 100R J	R278	VE-30012510	RESISTOR	1/16W 100R J
R143	VE-30012650	RESISTOR	1/16W 15K J	R279	VE-30012713	RESISTOR	1/16W 75R J
R144	VE-30000594	RESISTOR	1/4W 22K J	R280	VE-30012713	RESISTOR	1/16W 75R J
R145	VE-30012657	RESISTOR	1/16W 1K J	R281	VE-30000466	RESISTOR	1/4W 1K J
R147	VE-30012641	RESISTOR	1/16W 10K J	R282	VE-30012509	RESISTOR	1/16W 100K J
R148	VE-30012641	RESISTOR	1/16W 10K J	R283	VE-30012713	RESISTOR	1/16W 75R J
R149	VE-30000459	RESISTOR	1/4W 100R J	R298	VE-30012684	RESISTOR	1/16W 330R J
R150	VE-30012510	RESISTOR	1/16W 100R J	R299	VE-30012684	RESISTOR	1/16W 330R J
R155	VE-30012650	RESISTOR	1/16W 15K J	R300	VE-30012641	RESISTOR	1/16W 10K J
R158	VE-30012510	RESISTOR	1/16W 100R J	R302	VE-30012713	RESISTOR	1/16W 75R J
R159	VE-30000459	RESISTOR	1/4W 100R J	R304	VE-30012510	RESISTOR	1/16W 100R J
R160	VE-30012650	RESISTOR	1/16W 15K J	R305	VE-30012677	RESISTOR	1/16W 3.3K J
R167	VE-30012669	RESISTOR	1/16W 22K J	R307	VE-30012713	RESISTOR	1/16W 75R J
R168	VE-30000718	RESISTOR	1/4W 4.7K J	R308	VE-30012510	RESISTOR	1/16W 100R J
R170	VE-30000628	RESISTOR	1/4W 2.7K J	R316	VE-30012510	RESISTOR	1/16W 100R J
R171	VE-30000459	RESISTOR	1/4W 100R J	R318	VE-30012713	RESISTOR	1/16W 75R J
R172	VE-30012510	RESISTOR	1/16W 100R J	R327	VE-30012510	RESISTOR	1/16W 100R J
R173	VE-30012510	RESISTOR	1/16W 100R J	R328	VE-30012510	RESISTOR	1/16W 100R J
R174	VE-30012510	RESISTOR	1/16W 100R J	R400	VE-30012510	RESISTOR	1/16W 100R J
R175	VE-30012641	RESISTOR	1/16W 10K J	R401	VE-30012657	RESISTOR	1/16W 1K J
R176	VE-30012668	RESISTOR	1/16W 220R J	R402	VE-30012709	RESISTOR	1/16W 7.5K J
R178	VE-30000599	RESISTOR	1/4W 220K J	R403	VE-30000689	RESISTOR	1/4W 3.9K J
R179	VE-30012510	RESISTOR	1/16W 100R J	R406	VE-30000572	RESISTOR	1/4W 2K J
R180	VE-30012510	RESISTOR	1/16W 100R J	R407	VE-30000572	RESISTOR	1/4W 2K J
R181	VE-30012650	RESISTOR	1/16W 15K J	R408	VE-30012641	RESISTOR	1/16W 10K J
R182	VE-30000459	RESISTOR	1/4W 100R J	R409	VE-30012679	RESISTOR	1/16W 3.9K J
R185	VE-30012510	RESISTOR	1/16W 100R J	R410	VE-30000466	RESISTOR	1/4W 1K J
R187	VE-30006712	FERRITE BEAD		△R411	VE-30001207	FUSE RESISTOR	1/4W 10R J
R192	VE-30012510	RESISTOR	1/16W 100R J	R412	VE-30012641	RESISTOR	1/16W 10K J
R193	VE-30012510	RESISTOR	1/16W 100R J	R413	VE-30012689	RESISTOR	1/16W 39K J
R195	VE-30012695	RESISTOR	1/16W 470R J	R414	VE-30012679	RESISTOR	1/16W 3.9K J
R196	VE-30012657	RESISTOR	1/16W 1K J	R415	VE-30012643	RESISTOR	1/16W 120R J
R197	VE-30012657	RESISTOR	1/16W 1K J	R416	VE-30000689	RESISTOR	1/4W 3.9K J
R198	VE-30000495	RESISTOR	1/4W 1.2K J	R417	VE-30012657	RESISTOR	1/16W 1K J
R199	VE-30000975	RESISTOR	1/4W 39K J	R418	VE-30012709	RESISTOR	1/16W 7.5K J
R200	VE-30000770	RESISTOR	1/4W 680R J	R425	VE-30000452	RESISTOR	1/4W 10R J
R201	VE-30000477	RESISTOR	1/4W 100K J	R426	VE-30012689	RESISTOR	1/16W 39K J
R202	VE-30012642	RESISTOR	1/16W 120K J	R428	VE-30012650	RESISTOR	1/16W 15K J
R203	VE-30012696	RESISTOR	1/16W 47K J	R429	VE-30000580	RESISTOR	1/4W 22R J
R204	VE-30012504	RESISTOR	1/16W 1.2K J	R432	VE-30012641	RESISTOR	1/16W 10K J
R205	VE-30012510	RESISTOR	1/16W 100R J	R433	VE-30012698	RESISTOR	1/16W 5.6K J
R206	VE-30012688	RESISTOR	1/16W 390R J	R434	VE-30012510	RESISTOR	1/16W 100R J
R207	VE-30000459	RESISTOR	1/4W 100R J	R435	VE-30000580	RESISTOR	1/4W 22R J
R208	VE-30000459	RESISTOR	1/4W 100R J	R438	VE-30012641	RESISTOR	1/16W 10K J
R209	VE-30012644	RESISTOR	1/16W 12K J	R439	VE-30012641	RESISTOR	1/16W 10K J
R212	VE-30012510	RESISTOR	1/16W 100R J	R440	VE-30012659	RESISTOR	1/16W 2.2K J
R214	VE-30012644	RESISTOR	1/16W 12K J	R441	VE-30012510	RESISTOR	1/16W 100R J
R215	VE-30012641	RESISTOR	1/16W 10K J	R600	VE-30000452	RESISTOR	1/4W 10R J
R216	VE-30012641	RESISTOR	1/16W 10K J	R601	VE-30000770	RESISTOR	1/4W 680R J
R217	VE-30012641	RESISTOR	1/16W 10K J	R602	VE-30000477	RESISTOR	1/4W 100K J
R218	VE-30012708	RESISTOR	1/16W 68K J	R603	VE-30012656	RESISTOR	1/16W 18K J
R219	VE-30012641	RESISTOR	1/16W 10K J	R604	VE-30012654	RESISTOR	1/16W 180K J
R220	VE-30012641	RESISTOR	1/16W 10K J	R605	VE-30000452	RESISTOR	1/4W 10R J
R222	VE-30012510	RESISTOR	1/16W 100R J	R606	VE-30012659	RESISTOR	1/16W 2.2K J
R223	VE-30012510	RESISTOR	1/16W 100R J	R608	VE-30000458	RESISTOR	1/2W 100R J
R224	VE-30012510	RESISTOR	1/16W 100R J	R610	VE-30000459	RESISTOR	1/4W 100R J
R230	VE-30012641	RESISTOR	1/16W 10K J	R611	VE-30012708	RESISTOR	1/16W 68K J
R231	VE-30012510	RESISTOR	1/16W 100R J	R612	VE-30007200	RESISTOR	1/4W 10K F
R233	VE-30000459	RESISTOR	1/4W 100R J	△R613	VE-30001244	FUSE RESISTOR	1/2W 0.47R J
R234	VE-30012641	RESISTOR	1/16W 10K J	R614	VE-30012641	RESISTOR	1/16W 10K J
				R615	VE-30012657	RESISTOR	1/16W 1K J

△Ref No.	Part No.	Part Name	Description	Local	△Ref No.	Part No.	Part Name	Description	Local
R616	VE-30000649	RESISTOR	1/2W 33R J		R865	VE-30000787	RESISTOR	1/10W 680K J	
R617	VE-30012510	RESISTOR	1/16W 100R J		R866	VE-30000787	RESISTOR	1/10W 680K J	
R618	VE-30018904	RESISTOR	5W 4.7K J		R867	VE-30003638	RESISTOR	1W 270K J	
R620	VE-30001082	RESISTOR	1/2W 1K J		R868	VE-30000626	RESISTOR	1/10W 270R J	
R621	VE-30000459	RESISTOR	1/4W 100R J		TR600	VE-30032669	LINE DRIVER		
R622	VE-30014467	RESISTOR	1/16W 680K J		△TR800	VE-30031845	TRF		
R623	VE-30000459	RESISTOR	1/4W 100R J		VR800	VE-30042657	RESISTOR ADJ	1/10W 560R VER	
R624	VE-30000590	RESISTOR	1/4W 2.2K J		L100	VE-30001971	FERRITE		
R625	VE-30000470	RESISTOR	1/2W 10K J		L101	VE-30001971	FERRITE		
R626	VE-30000590	RESISTOR	1/4W 2.2K J		L103	VE-30001971	FERRITE		
△R627	VE-30001244	FUSE RESISTOR	1/2W 0.47R J		L104	VE-30001971	FERRITE		
R628	VE-30012696	RESISTOR	1/16W 47K J		L105	VE-30001971	FERRITE		
△R629	VE-30002828	FUSE RESISTOR	1W 0.75R J		L106	VE-30001971	FERRITE		
△R630	VE-30001245	FUSE RESISTOR	1/4W 0.47R J		L107	VE-30001971	FERRITE		
△R631	VE-30001245	FUSE RESISTOR	1/4W 0.47R J		L108	VE-30001979	FIXED COIL		
R632	VE-30015578	RESISTOR	1/16W 2.2R J		L110	VE-30001971	FERRITE		
R633	VE-30001089	RESISTOR	2W 1R J		L111	VE-30001971	FERRITE		
R634	VE-30000466	RESISTOR	1/4W 1K J		L113	VE-30001971	FERRITE		
R635	VE-30000628	RESISTOR	1/4W 2.7K J		L114	VE-30001971	FERRITE		
R636	VE-30001122	RESISTOR	1W 220R J		L115	VE-30001971	FERRITE		
R637	VE-30012657	RESISTOR	1/16W 1K J		L116	VE-30001971	FERRITE		
R638	VE-30023224	RESISTOR	1/16W 12K F		L117	VE-30001971	FERRITE		
R639	VE-30000977	RESISTOR	1/4W 39K F		L118	VE-30001971	FERRITE		
R640	VE-30012705	RESISTOR	1/16W 6.8K J		L119	VE-30001971	FERRITE		
R641	VE-30000848	RESISTOR	1/4W 1K F		L120	VE-30001971	FERRITE		
R642	VE-30000837	RESISTOR	1/4W 9.1K J		L121	VE-30001971	FERRITE		
△R643	VE-30001246	FUSE RESISTOR	1W 0.47R J		L122	VE-30001971	FERRITE		
R644	VE-30044855	RESISTOR	1/4W 8.2K F		L123	VE-30001971	FERRITE		
R645	VE-30015227	RESISTOR	1/10W 1.2K F		L124	VE-30001971	FERRITE		
R646	VE-30012659	RESISTOR	1/16W 2.2K J		L125	VE-30001971	FERRITE		
R647	VE-30012659	RESISTOR	1/16W 2.2K J		L127	VE-30001971	FERRITE		
R648	VE-30000469	RESISTOR	1/10W 1K J		L128	VE-30001971	FERRITE		
R649	VE-30012659	RESISTOR	1/16W 2.2K J		L129	VE-30001971	FERRITE		
R650	VE-30012662	RESISTOR	1/16W 2.7K J		L130	VE-30001971	FERRITE		
R651	VE-30012692	RESISTOR	1/16W 4.7K J		L131	VE-30001971	FERRITE		
R652	VE-30000583	RESISTOR	1/4W 220R		L132	VE-30001971	FERRITE		
R653	VE-30000480	RESISTOR	1/10W 100K J		L133	VE-30001971	FERRITE		
△R800	VE-30018085	CAPACITOR VAR	510V K		L134	VE-30001971	FERRITE		
R801	VE-30000718	RESISTOR	1/4W 4.7K J		L135	VE-30001971	FERRITE		
△R802	VE-30018085	CAPACITOR VAR	510V K		L136	VE-30001971	FERRITE		
R806	VE-30000594	RESISTOR	1/4W 22K J		L142	VE-30001971	FERRITE		
R809	VE-30012657	RESISTOR	1/16W 1K J		L143	VE-30001971	FERRITE		
R810	VE-30007784	RESISTOR	5W 33K J		L144	VE-30001971	FERRITE		
R811	VE-30000683	RESISTOR	1/4W 390R J		L145	VE-30001971	FERRITE		
R812	VE-30000452	RESISTOR	1/4W 10R J		L146	VE-30006712	FERRITE BEAD		
R813	VE-30012692	RESISTOR	1/16W 4.7K J		L400	VE-30006712	FERRITE BEAD		
R815	VE-30001174	RESISTOR	2W 0.47R J		L401	VE-30006712	FERRITE BEAD		
R816	VE-30001159	RESISTOR	1W 0.33R J		L403	VE-30029326	FIXED COIL	33uH	
△R817	VE-30001257	RESISTOR	1/2W 4.7M J		L404	VE-30029326	FIXED COIL	33uH	
R818	VE-30012702	RESISTOR	1/16W 560R J		L600	VE-30001075	RESISTOR	1/2W 10R J	
R820	VE-30014022	RESISTOR	1/16W 47R J		L601	VE-30031873	INJECTION COIL		
R825	VE-30012641	RESISTOR	1/16W 10K J		L602	VE-30002829	BRIDGE COIL		
R826	VE-30014128	RESISTOR	1/16W 33R J		L603	VE-30032994	LINEARITY COIL		
R827	VE-30012697	RESISTOR	1/16W 5.1K J		△L800	VE-30018866	LINE FILTER		
R828	VE-30000718	RESISTOR	1/4W 4.7K J		L801	VE-30001992	FIXED COIL		
R829	VE-30012697	RESISTOR	1/16W 5.1K J		L803	VE-30001971	FERRITE		
R830	VE-30012659	RESISTOR	1/16W 2.2K J		L805	VE-30043207	FIXED COIL	22uH	
R831	VE-30012641	RESISTOR	1/16W 10K J		J147	VE-30006712	FERRITE BEAD		
R832	VE-30012641	RESISTOR	1/16W 10K J		J153	VE-30006712	FERRITE BEAD		
R833	VE-30012675	RESISTOR	1/16W 2K J		J287	VE-30006712	FERRITE BEAD		
R834	VE-30000880	RESISTOR	1/4W 130K F		PL110	VE-30031178	DOUBLE DECK SCART SOCKET	EXT-1/EXT-2	
R835	VE-30012692	RESISTOR	1/16W 4.7K J		TU100	VE-30033888	TUNER		
R836	VE-30012641	RESISTOR	1/16W 10K J		X100	VE-30001741	CLYSTAT	24.576MHz	
R837	VE-30001173	RESISTOR	1W 0.47R J		Z100	VE-30014261	SAW FILTER		
R838	VE-30012641	RESISTOR	1/16W 10K J		Z101	VE-30012545	SAW FILTER		
R839	VE-30000664	RESISTOR	1/10W 3.3K J						
R840	VE-30000664	RESISTOR	1/10W 3.3K J						
R841	VE-30012641	RESISTOR	1/16W 10K J						
R842	VE-30012659	RESISTOR	1/16W 2.2K J						
R843	VE-30000477	RESISTOR	1/4W 100K J						
R844	VE-30012641	RESISTOR	1/16W 10K J						
R846	VE-30012692	RESISTOR	1/16W 4.7K J						
R847	VE-30000481	RESISTOR	1/4W 1M J						
R848	VE-30000660	RESISTOR	1/4W 3.3K J						
R849	VE-30012668	RESISTOR	1/16W 220R J						
R850	VE-30012657	RESISTOR	1/16W 1K J						
R851	VE-30000477	RESISTOR	1/4W 100K J						
R852	VE-30012657	RESISTOR	1/16W 1K J						
R853	VE-30012697	RESISTOR	1/16W 5.1K J						
R854	VE-30012506	RESISTOR	1/16W 1.5K J						
R855	VE-30028198	RESISTOR	1/16W 3K F						
R856	VE-30000459	RESISTOR	1/4W 100R J						
R857	VE-30000526	RESISTOR	1/4W 1.5K J						
R858	VE-30012719	RESISTOR	1/16W 910R J						
R859	VE-30012641	RESISTOR	1/16W 10K J						
R860	VE-30012641	RESISTOR	1/16W 10K J						
R861	VE-30012641	RESISTOR	1/16W 10K J						
R862	VE-30012641	RESISTOR	1/16W 10K J						
R863	VE-30012641	RESISTOR	1/16W 10K J						
R864	VE-30000787	RESISTOR	1/10W 680K J						

CRT SOCKET P.W. BOARD ASS'Y (VE-20247134)

△Ref No.	Part No.	Part Name	Description	Local
IC900	VE-30041527	IC		
IC901	VE-30001318	DIODE		
IC902	VE-30001318	DIODE		
IC903	VE-30001318	DIODE		
IC904	VE-30001318	DIODE		
IC905	VE-30001284	DIODE		
Q900	VE-30001427	TRANSISTOR		
Q901	VE-30017863	TRANSISTOR		
Q905	VE-30001455	TRANSISTOR		
D902	VE-30001344	DIODE		
D903	VE-30001284	DIODE		
D904	VE-30001284	DIODE		
D905	VE-30001284	DIODE		

△Ref No.	Part No.	Part Name	Description Local
D906	VE-30001284	DIODE	
D907	VE-30001350	DIODE	
C900	VE-30000075	CAPACITOR	100nF 250V K
C901	VE-30000075	CAPACITOR	100nF 250V K
C902	VE-30000350	E CAPACITOR	10uF 250V M
C903	VE-30000415	E CAPACITOR	4.7uF 250V M
C904	VE-30000075	CAPACITOR	100nF 250V K
C906	VE-30000287	C CAPACITOR	10nF 50V K
C917	VE-30000072	CAPACITOR	10nF 1250V J
C920	VE-30000283	C CAPACITOR	1nF 50V K
C923	VE-30000375	E CAPACITOR	220uF 16V M
R900	VE-30000459	RESISTOR	1/4W 100R J
R901	VE-30000459	RESISTOR	1/4W 100R J
R902	VE-30000459	RESISTOR	1/4W 100R J
R903	VE-30023197	RESISTOR	1W 1.5K K
R904	VE-30023197	RESISTOR	1W 1.5K K
R905	VE-30023197	RESISTOR	1W 1.5K K
△R906	VE-30001208	FUSE RESISTOR	1W 10R J
R907	VE-30000458	RESISTOR	1/2W 100R J
R908	VE-30000788	RESISTOR	1/4W 6.8M J
R909	VE-30000535	RESISTOR	1/2W 150K J
R910	VE-30000477	RESISTOR	1/4W 100K J
R911	VE-30000477	RESISTOR	1/4W 100K J
R912	VE-30000466	RESISTOR	1/4W 1K J
R913	VE-30039143	RESISTOR	1/4W 100R K
△R915	VE-30001247	FUSE RESISTOR	1/2W 4.7R J
R916	VE-30000477	RESISTOR	1/4W 100K J
R917	VE-30000622	RESISTOR	1/4W 270R J
R918	VE-30000459	RESISTOR	1/4W 100R J
R919	VE-30000622	RESISTOR	1/4W 270R J
R922	VE-30000466	RESISTOR	1/4W 1K J
R928	VE-30001138	RESISTOR	1W 2.7K J
R934	VE-30000452	RESISTOR	1/4W 10R J
R935	VE-30000723	RESISTOR	1/4W 47K J
R936	VE-30000471	RESISTOR	1/4W 10K J
R937	VE-30000554	RESISTOR	1/4W 180R J
L1	VE-30001987	FIXED COIL	
△PL906	VE-30031572	CRT SOCKET	
SG900	VE-30000428	SPARK GAP	
SG901	VE-30000428	SPARK GAP	
SG902	VE-30000428	SPARK GAP	
SG903	VE-30021532	SPARK GAP	
SG904	VE-30000428	SPARK GAP	

SIDE CONTROL P.W. BOARD ASS'Y (VE-20166350)

△Ref No.	Part No.	Part Name	Description Local
R1	VE-30000689	RESISTOR	1/4W 3.9K J
R2	VE-30000526	RESISTOR	1/4W 1.5K J
R3	VE-30000770	RESISTOR	1/4W 680R J
R4	VE-30000712	RESISTOR	1/4W 470R J
R5	VE-30000622	RESISTOR	1/4W 270R J
SW1	VE-30032684	TACT SWITCH	VOLUME -
SW2	VE-30032684	TACT SWITCH	VOLUME +
SW3	VE-30032684	TACT SWITCH	PROGRAM -
SW4	VE-30032684	TACT SWITCH	PROGRAM +
SW5	VE-30032684	TACT SWITCH	MENU

AV & HEADPHONE P.W. BOARD ASS'Y (VE-20226778)

△Ref No.	Part No.	Part Name	Description Local
D100	VE-30001371	Z DIODE	
D101	VE-30001371	Z DIODE	
D102	VE-30001371	Z DIODE	
D103	VE-30001371	Z DIODE	
D104	VE-30001371	Z DIODE	
C101	VE-30000191	C CAPACITOR	100pF 50V J
C102	VE-30000191	C CAPACITOR	100pF 50V J
C103	VE-30000191	C CAPACITOR	100pF 50V J
C104	VE-30000433	C CAPACITOR	1nF 1KV M
C105	VE-30000433	C CAPACITOR	1nF 1KV M
C106	VE-30000330	C CAPACITOR	4.7nF 50V K
C107	VE-30000330	C CAPACITOR	4.7nF 50V K
R100	VE-30000594	RESISTOR	1/4W 22K J
R101	VE-30000712	RESISTOR	1/4W 470R J

△Ref No.	Part No.	Part Name	Description Local
R102	VE-30000594	RESISTOR	1/4W 22K J
R103	VE-30000712	RESISTOR	1/4W 470R J
R106	VE-30000621	RESISTOR	1/2W 270R J
R107	VE-30000621	RESISTOR	1/2W 270R J
R108	VE-30000551	RESISTOR	1/4W 18R J
R109	VE-30000551	RESISTOR	1/4W 18R J
L100	VE-30001979	FIXED COIL	
JK101	VE-30032639	JACK	EXT-3 AUDION IN(L)
JK102	VE-30032636	JACK	EXT-3 VIDEO IN
JK103	VE-30032638	JACK	EXT-3 AUDION IN(R)
JK104	VE-30031077	HEADPHONE JACK	HEADPHONE

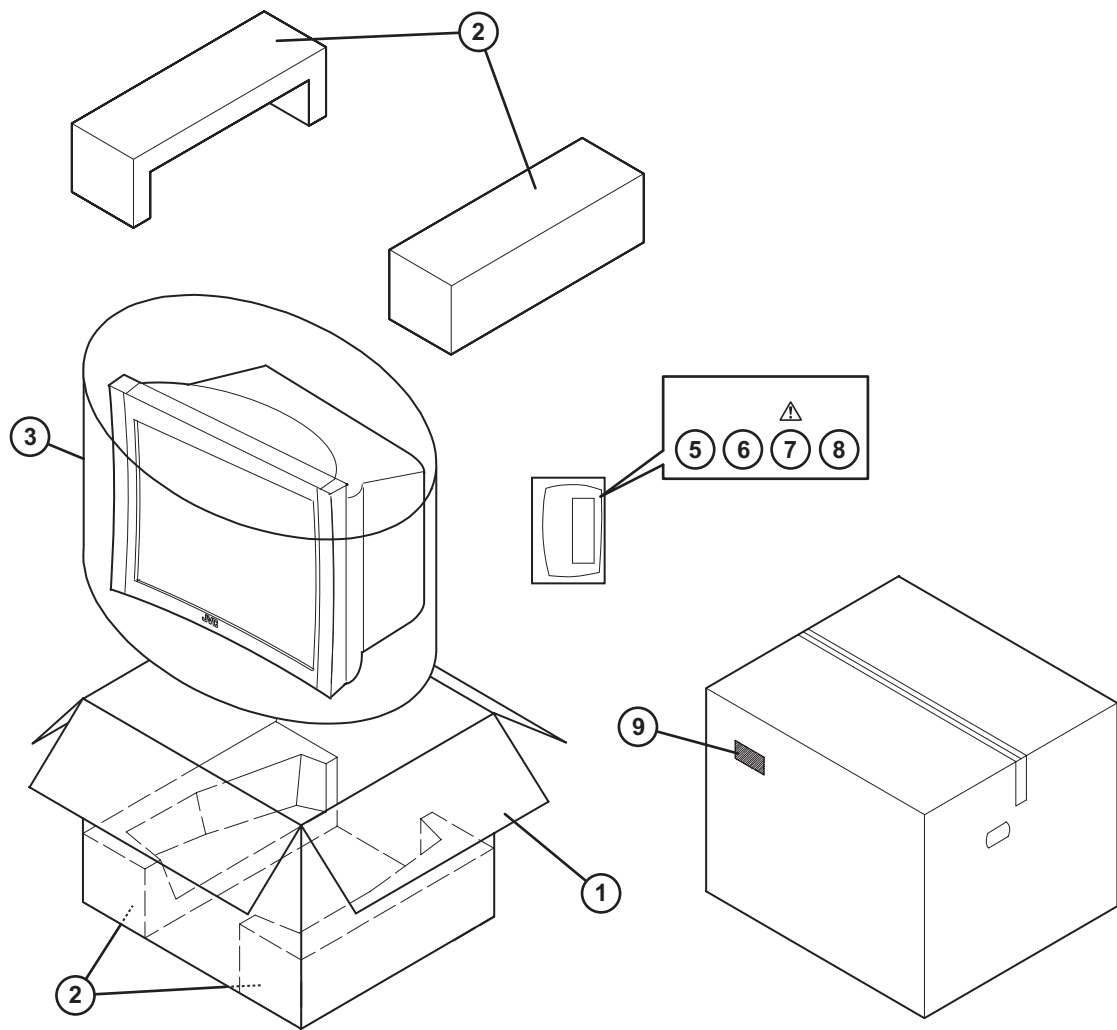
LED P.W. BOARD ASS'Y (VE-20167316)

△Ref No.	Part No.	Part Name	Description Local
IC1	VE-30031033	PREAMPLIFIER	
D1	VE-30001279	LED	RED/GREEN
C1	VE-30000371	E CAPACITOR	22uF 50V M

POWER SW P.W. BOARD ASS'Y (VE-20209386)

△Ref No.	Part No.	Part Name	Description Local
△F801	VE-30031038	FUSE	2.5A 250V
△SW1	VE-30022450	SWITCH	

PACKING



PACKING PARTS LIST

△	Ref.No.	Part No.	Part Name	Description	Local
	1	VE-50086740	CARTON BOX		
	2	VE-20155108	SNOW BOX ASSY	4pcs in 1set	
	3	VE-50042311	POLY BAG	(1300x1100mm)	
	5	VE-30021287	REMOTE CONTROL UNIT	RM-C1512	
	6	-----	BATTERY	AA/R06 TYPE(x2)	
△	7	VE-50086700	INST BOOK	English/Portuguese/Italian/Spanish/French/Dutch/German	
△	7	VE-50086731	INST BOOK	Norwegian/Swedish/Danish/Finn	
△	7	VE-50086732	INST BOOK	Romanian/Polish/Hungarian/Czech/Bulgarian	
	8	-----	WARRANTY CARD	VE-50051274	
	9	VE-20264943	LABEL		

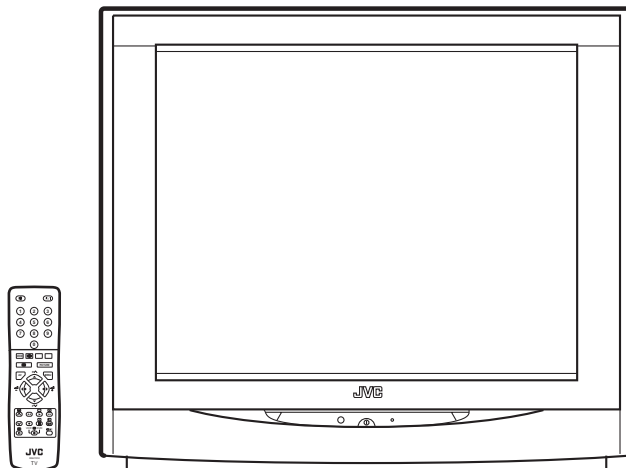
JVC

SCHEMATIC DIAGRAMS

COLOUR TELEVISION

AV-29QT4SU/D

CD-ROM No.SML200607



AV-29QT4SU/D

STANDARD CIRCUIT DIAGRAM

■ NOTE ON USING CIRCUIT DIAGRAMS

1.SAFETY

The components identified by the \triangle symbol and shading are critical for safety. For continued safety replace safety critical components only with manufactures recommended parts.

2.SPECIFIED VOLTAGE AND WAVEFORM VALUES

The voltage and waveform values have been measured under the following conditions.

- (1)Input signal : Colour bar signal
- (2)Setting positions of each knob/button and variable resistor : Original setting position when shipped
- (3)Internal resistance of tester : DC 20k Ω /V
- (4)Oscilloscope sweeping time : H \Rightarrow 20 μ s / div
: V \Rightarrow 5ms / div
: Others \Rightarrow Sweeping time is specified
- (5)Voltage values : All DC voltage values

* Since the voltage values of signal circuit vary to some extent according to adjustments, use them as reference values.

3.INDICATION OF PARTS SYMBOL [EXAMPLE]

- In the PW board : R209 \rightarrow R209

4.INDICATIONS ON THE CIRCUIT DIAGRAM

(1)Resistors

● Resistance value

- No unit : [Ω]
- K : [k Ω]
- M : [M Ω]

● Rated allowable power

- No indication : 1/16 [W]
- Others : As specified

● Type

- No indication : Carbon resistor
- OMR : Oxide metal film resistor
- MFR : Metal film resistor
- MPR : Metal plate resistor
- UNFR : Uninflamable resistor
- FR : Fusible resistor

* Composition resistor 1/2 [W] is specified as 1/2S or Comp.

(2)Capacitors

● Capacitance value

- 1 or higher : [pF]
- less than 1 : [μ F]

● Withstand voltage

- No indication : DC50[V]
- Others : DC withstand voltage [V]
- AC indicated : AC withstand voltage [V]

* Electrolytic Capacitors

47/50[Example]: Capacitance value [μ F]/withstand voltage[V]

● Type

- No indication : Ceramic capacitor
- MM : Metalized mylar capacitor
- PP : Polypropylene capacitor
- MPP : Metalized polypropylene capacitor
- MF : Metalized film capacitor
- TF : Thin film capacitor
- BP : Bipolar electrolytic capacitor
- TAN : Tantalum capacitor

(3)Coils

- No unit : [μ H]
- Others : As specified

(4)Power Supply




-  : B1
-  : B2 (12V)
-  : 9V
-  : 5V

* Respective voltage values are indicated





(5)Test point

-  : Test point
-  : Only test point display



(6)Connecting method

-  : Connector
-  : Wrapping or soldering
-  : Receptacle

(7)Ground symbol

-  : LIVE side ground
-  : ISOLATED(NEUTRAL) side ground
-  : EARTH ground
-  : DIGITAL ground

5.NOTE FOR REPAIRING SERVICE

This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : () side GND and the ISOLATED(NEUTRAL) : () side GND. Therefore, care must be taken for the following points.

- (1)Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. if the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.
- (2)Do not short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or never measure with a measuring apparatus (oscilloscope, etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND at the same time. If the above precaution is not respected, a fuse or any parts will be broken.

◆ Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.

NOTE

◆ Due improvement in performance, some part numbers show in the circuit diagram may not agree with those indicated in the part list.

When ordering parts, please use the numbers that appear in the Parts List.

CONTENTS

SEMICONDUCTOR SHAPES

2-2

WIRING DIAGRAM

2-3

BLOCK DIAGRAM

2-4

CIRCUIT DIAGRAMS

MAIN PWB CIRCUIT DIAGRAM

2-5

CRT SOCKET PWB CIRCUIT DIAGRAM

2-13

AV & HEADPHONE PWB CIRCUIT DIAGRAM

2-15

SIDE CONTROL PWB CIRCUIT DIAGRAM

2-17

LED PWB CIRCUIT DIAGRAM

2-17

POWER SW PWB CIRCUIT DIAGRAM

2-18

PATTERN DIAGRAMS

MAIN PWB PATTERN

2-19

CRT SOCKET PWB PATTERN

2-23

AV & HEADPHONE PWB PATTERN

2-24

SIDE CONTROL PWB PATTERN

2-25

LED PWB PATTERN

2-25

SWITCH PWB PATTERN

2-25

USING P.W. BOARD

P.W.B ASS'Y name	P.W.B ASS'Y number
MAIN P.W. BOARD	VE-20265029
CRT SOCKET P.W. BOARD	VE-20247134
SIDE CONTROL P.W. BOARD	VE-20166350
AV & HEADPHONE P.W. BOARD	VE-20226778
LED P.W. BOARD	VE-20167316
POWER SW P.W. BOARD	VE-20209386

SEMICONDUCTOR SHAPES

TRANSISTOR

BOTTOM VIEW	FRONT VIEW				TOP VIEW
					CHIP TR

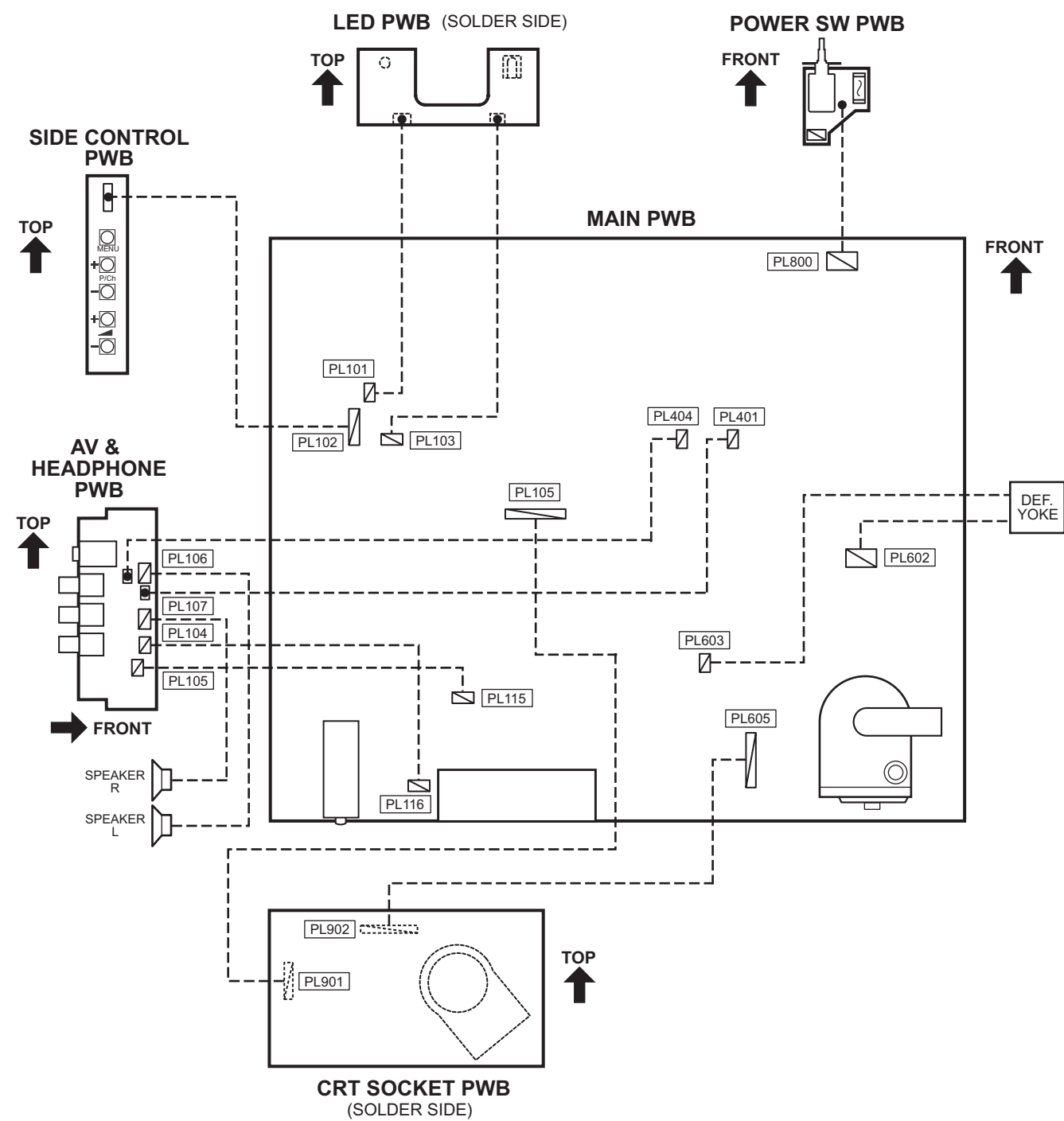
IC

BOTTOM VIEW	FRONT VIEW			TOP VIEW

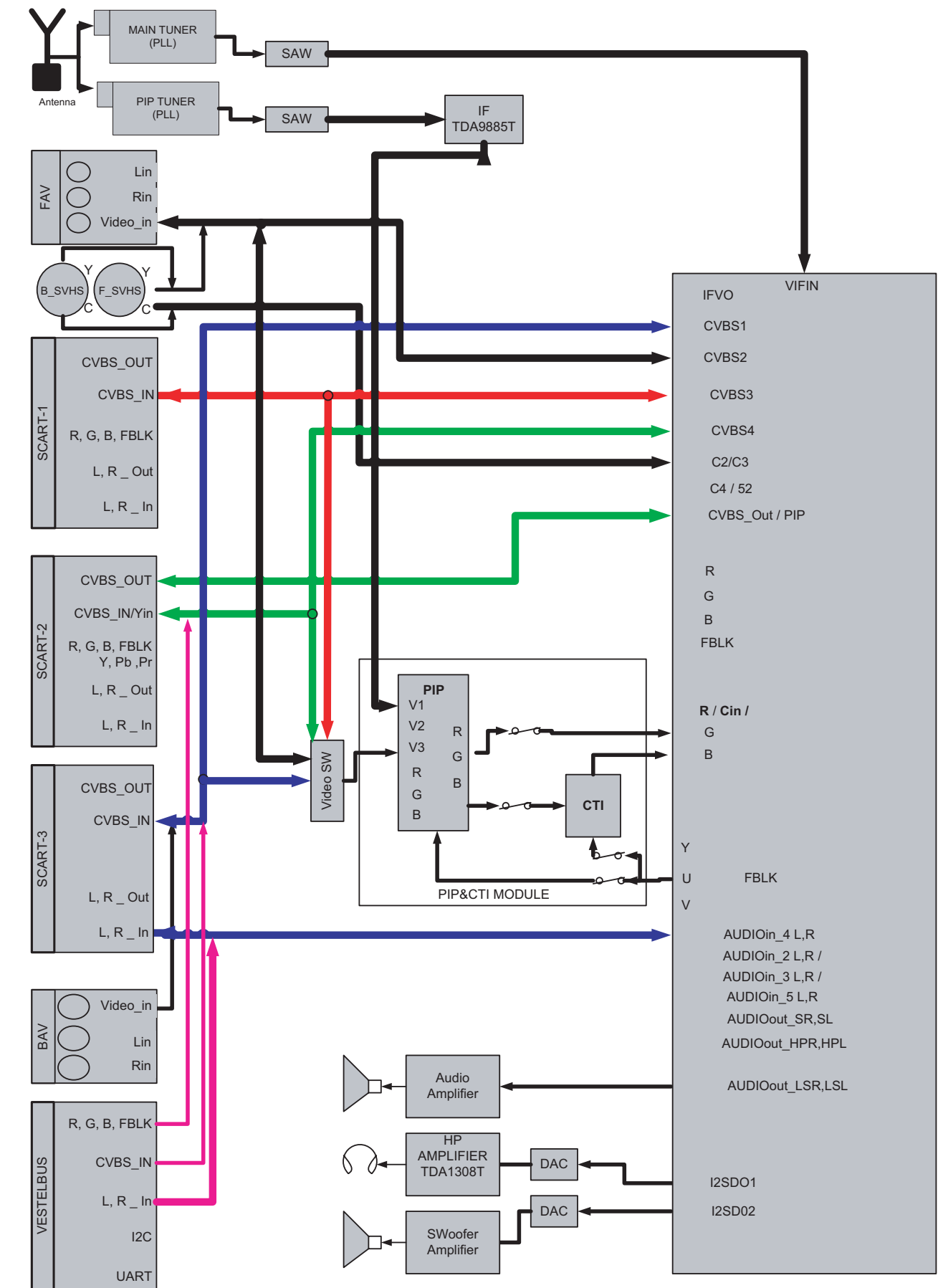
CHIP IC

TOP VIEW		

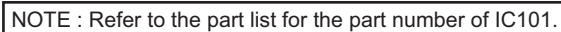
WIRING DIAGRAM



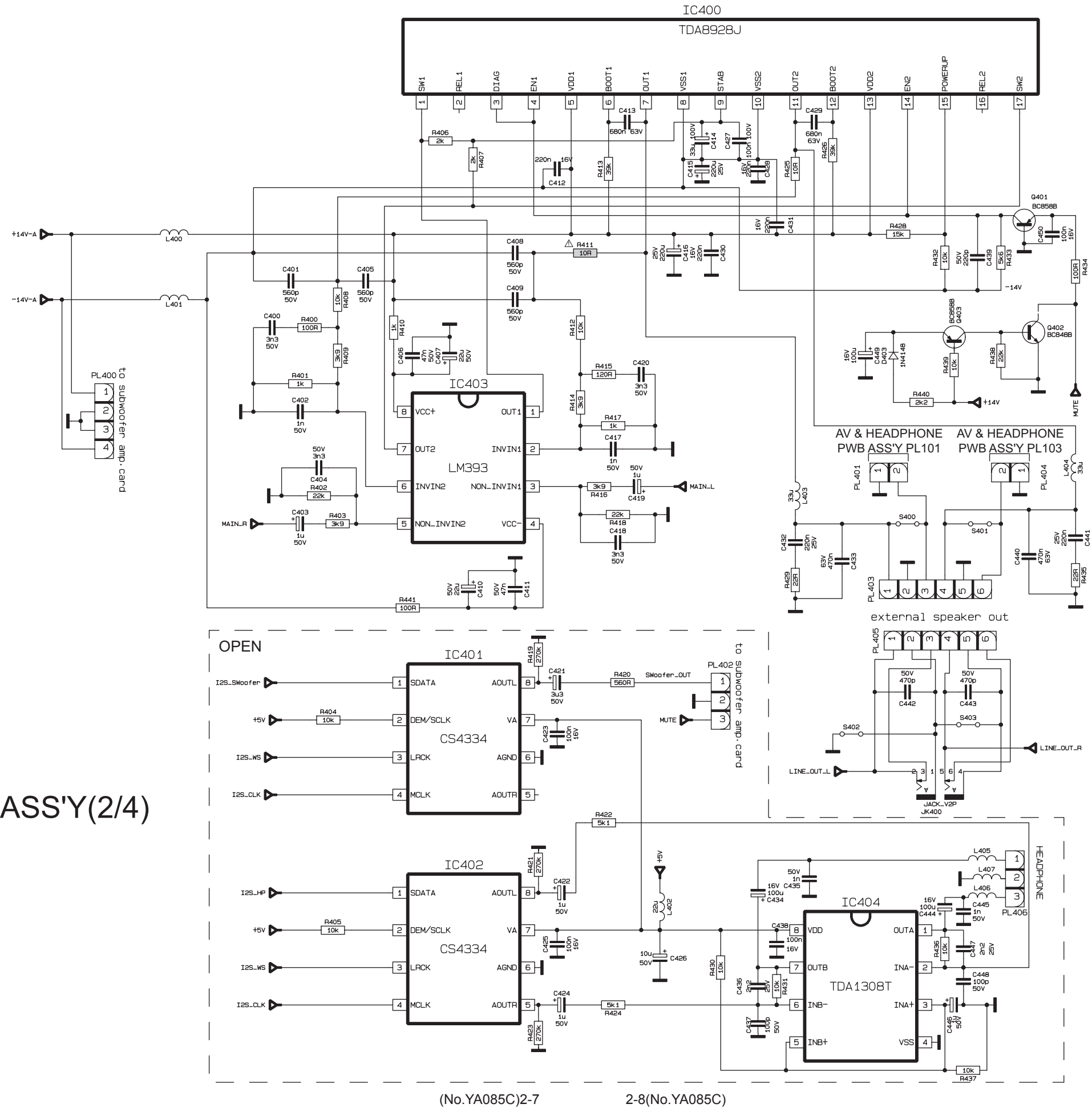
BLOCK DIAGRAM



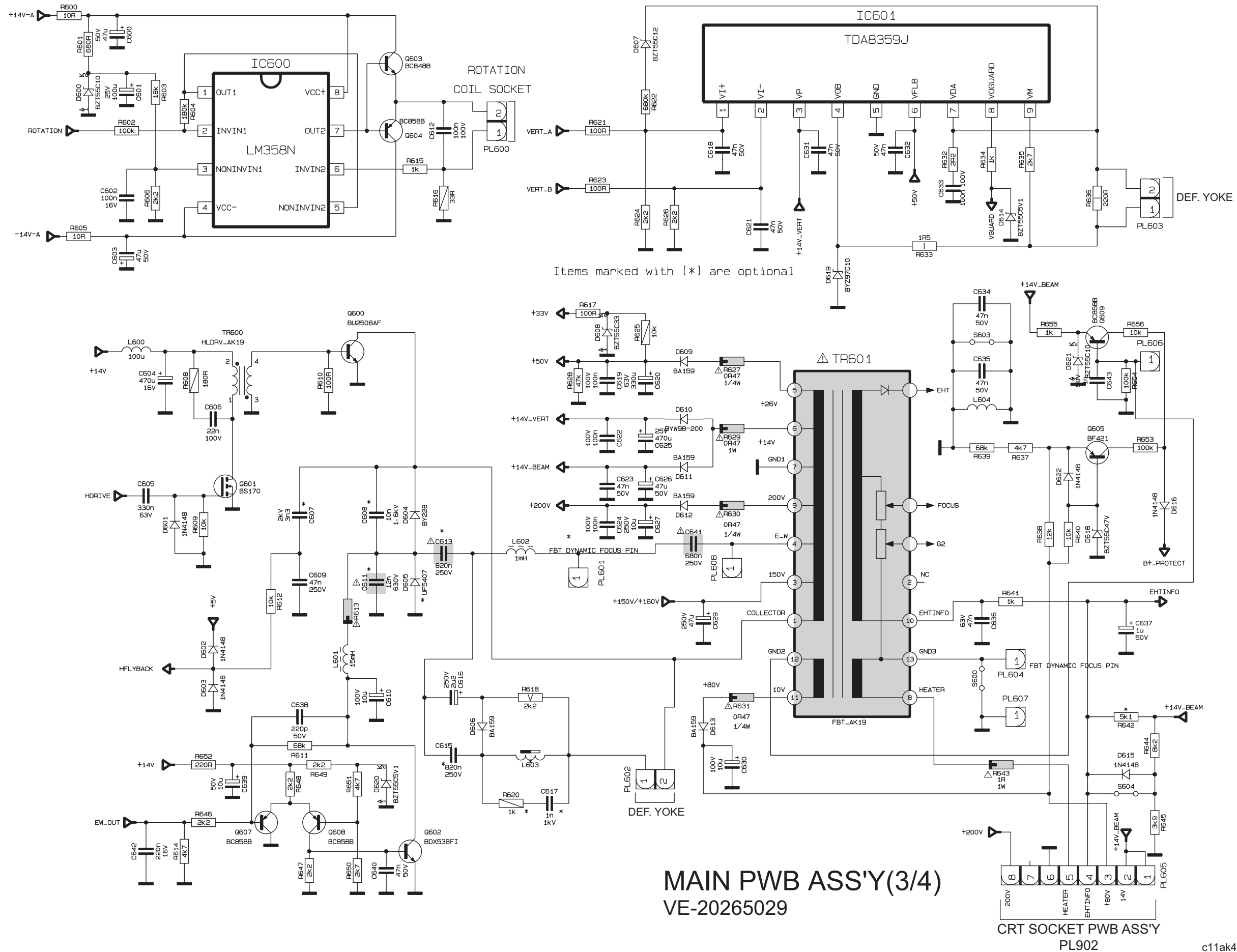
MAIN PWB CIRCUIT DIAGRAM (1/4)



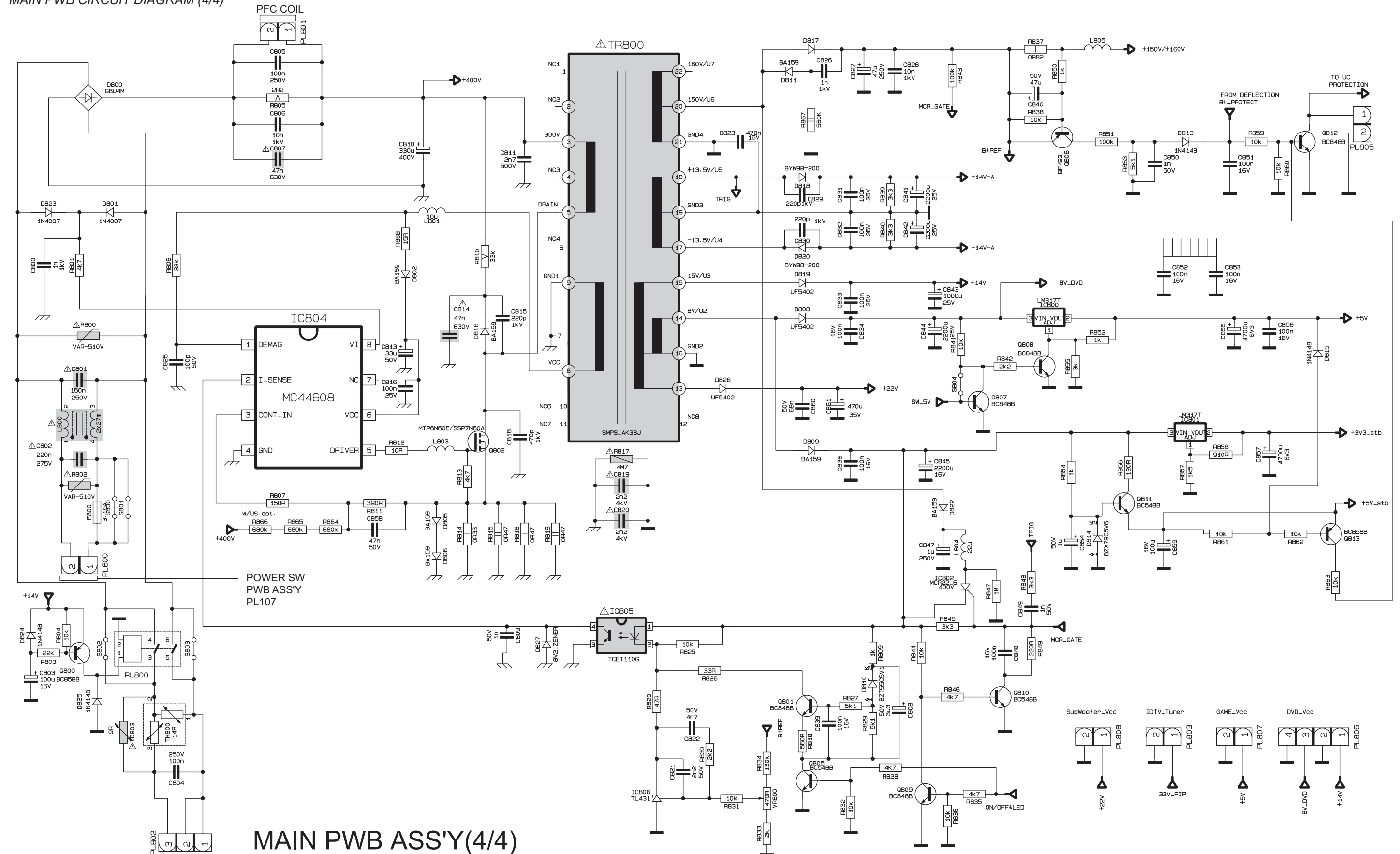
c11ak49-7_0017_0413_4/4_0.0



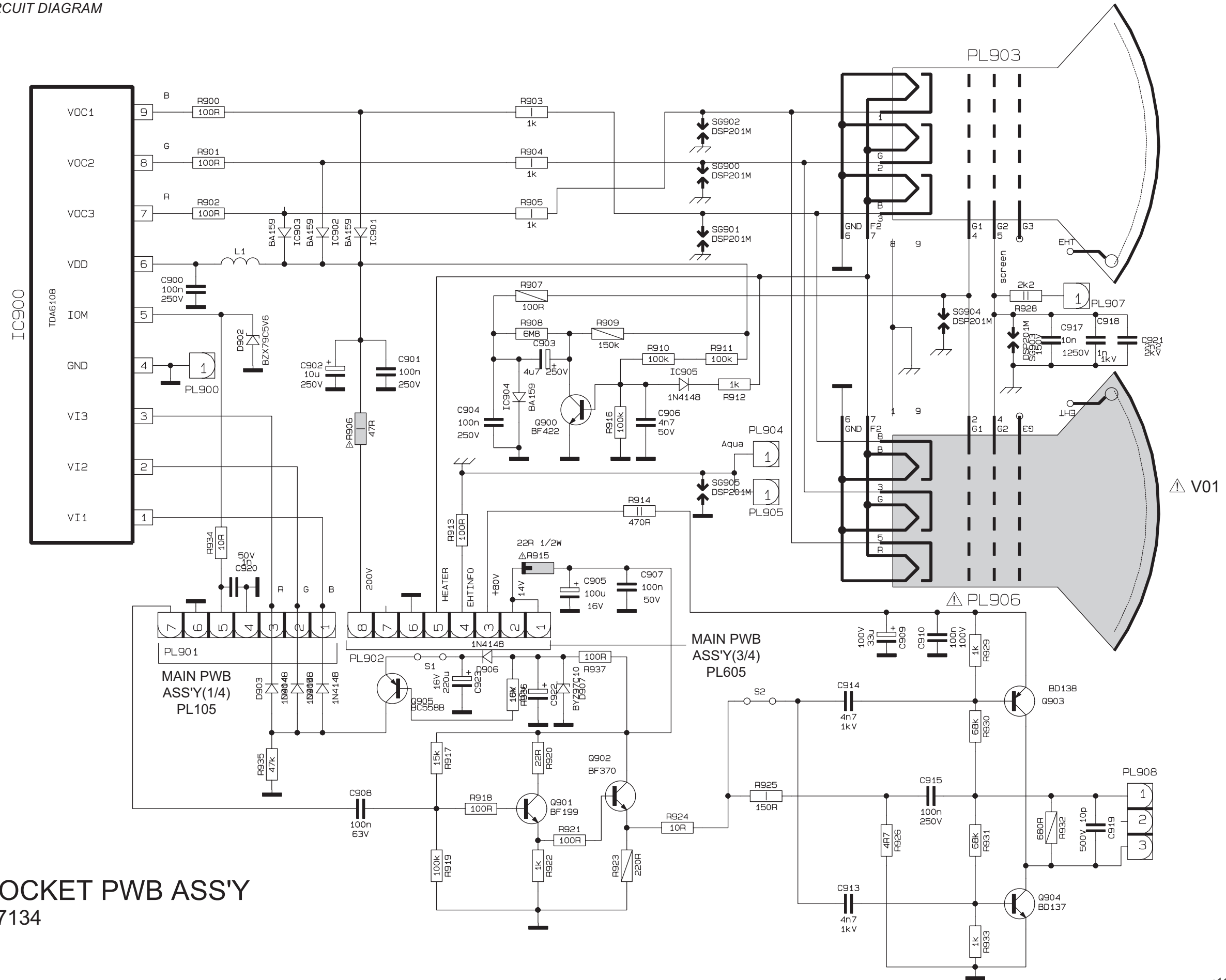
MAIN PWB CIRCUIT DIAGRAM (3/4)



MAIN PWB CIRCUIT DIAGRAM (4/4)

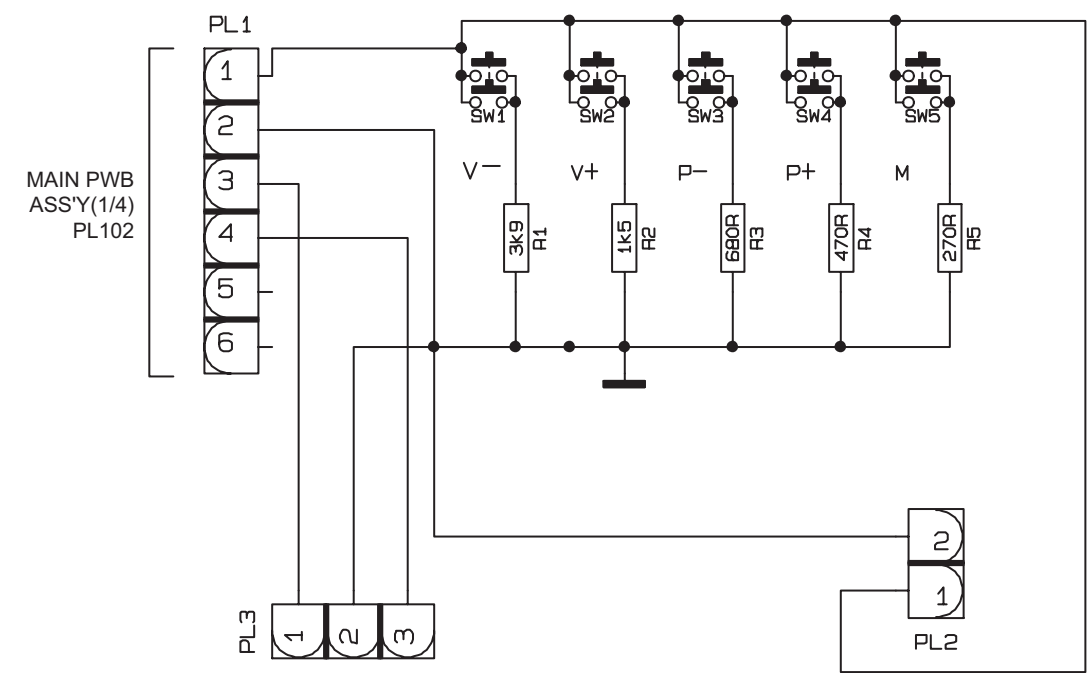


MAIN PWB ASS'Y(4/4)
VE-20265029



CRT SOCKET PWB ASS'Y
VE-20247134

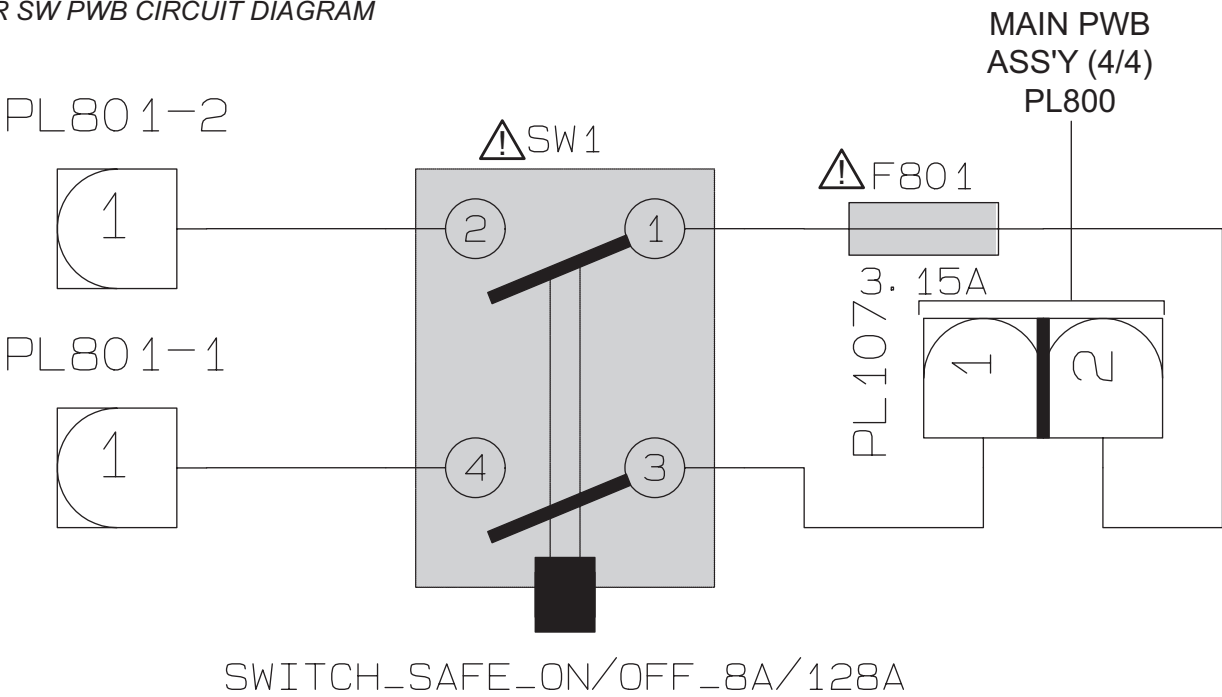
SIDE CONTROL PWB CIRCUIT DIAGRAM



SIDE CONTROL PWB ASS'Y
VE-20166350

c11tk147-4_0602_1/1_0.0

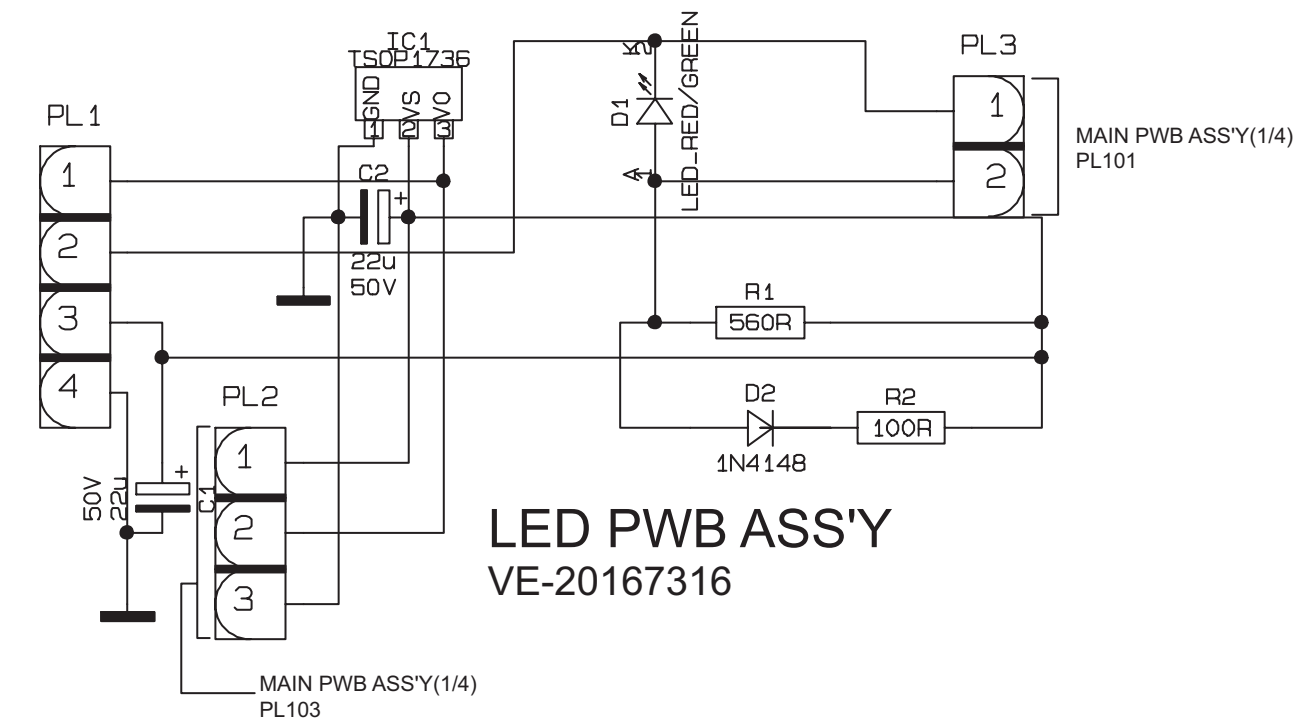
POWER SW PWB CIRCUIT DIAGRAM



POWER SW PWB ASS'Y
VE-20209386

c11sw02_0509_1/1_0.0

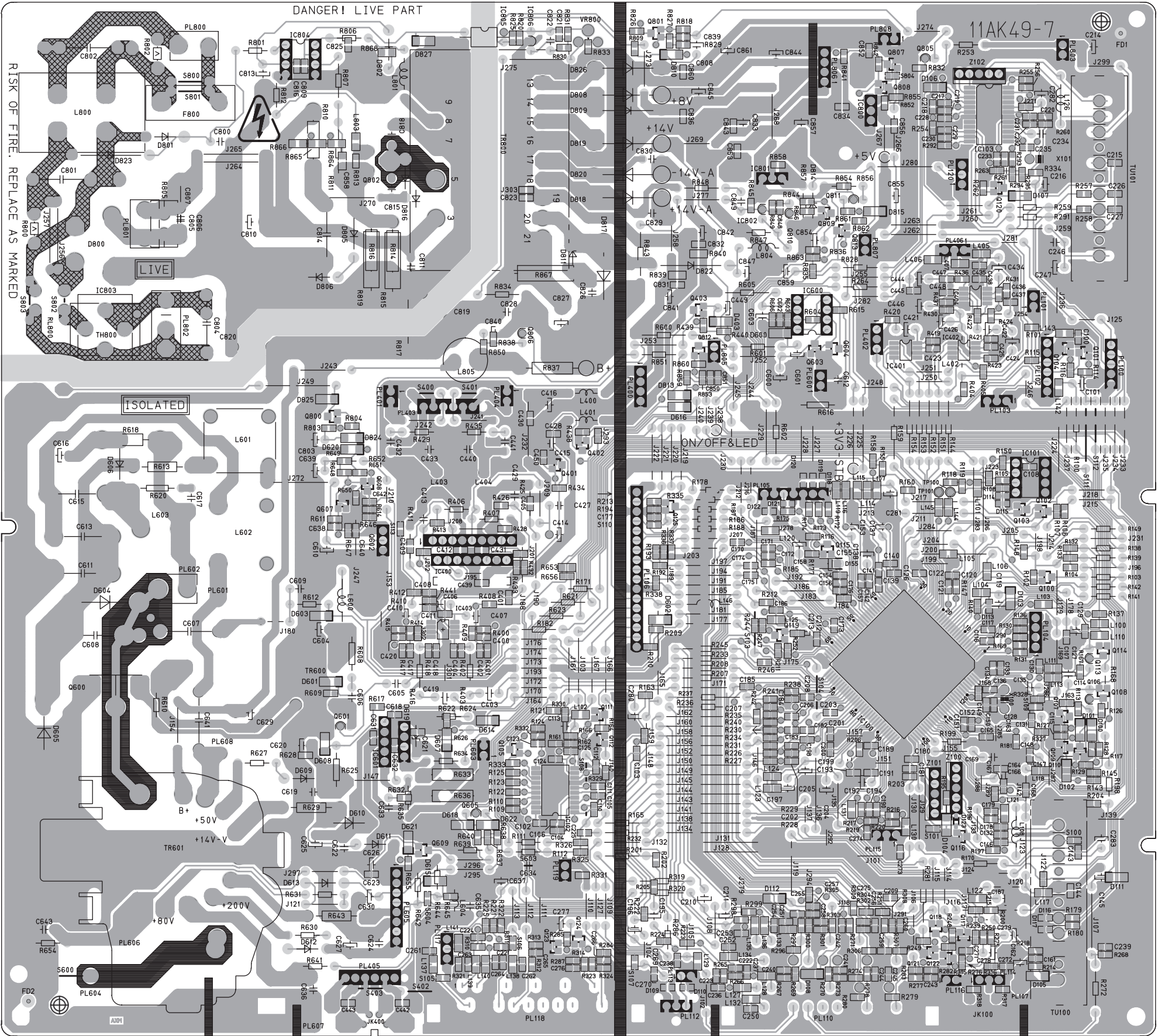
LED PWB CIRCUIT DIAGRAM



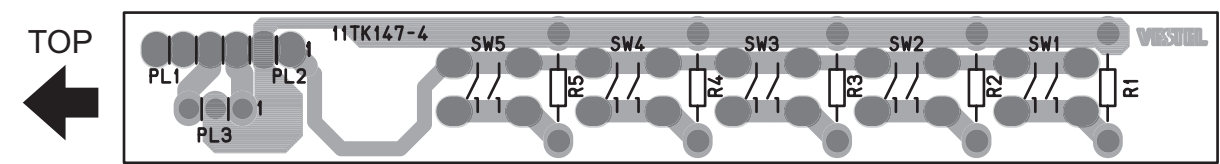
LED PWB ASS'Y
VE-20167316

c11ld22-1_0602_1/1_0.0

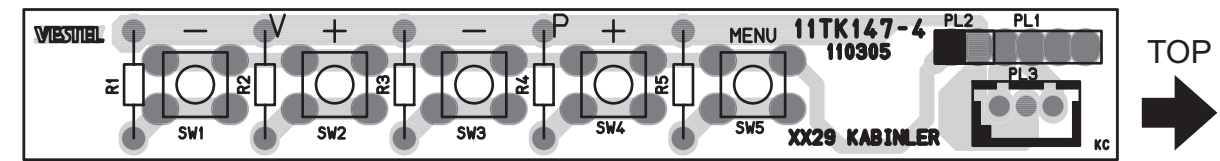
PATTERN DIAGRAMS
MAIN PWB PATTERN [SOLDER SIDE]



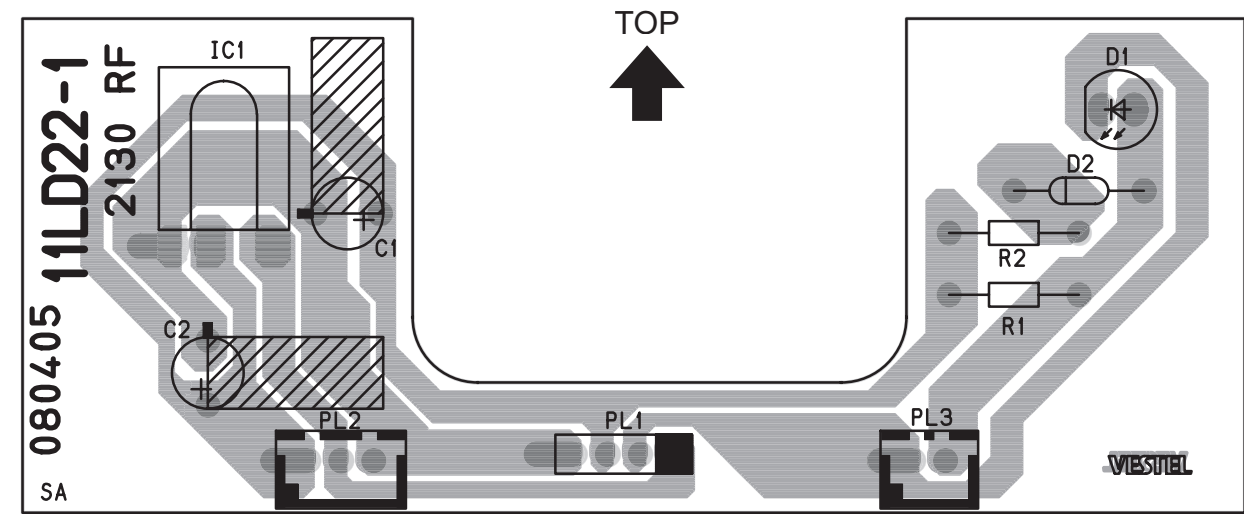
SIDE CONTROL PWB PATTERN [SOLDER SIDE]



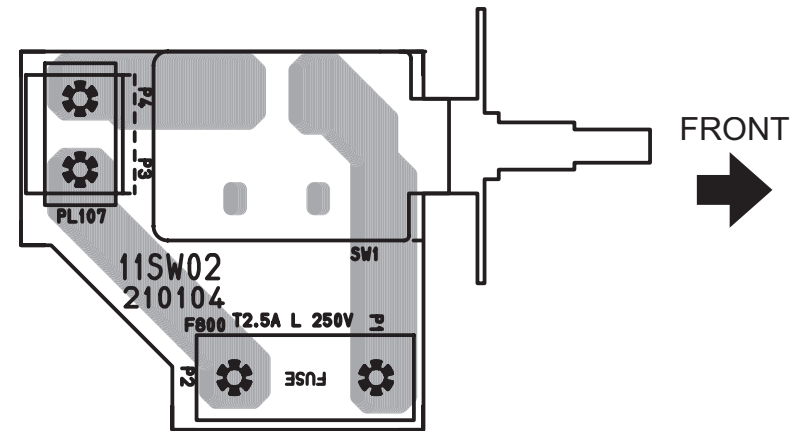
SIDE CONTROL PWB PATTERN [PARTS SIDE]



LED PWB PATTERN



POWER SW PWB PATTERN





Victor Company of Japan, Limited
Display Category 12, 3-chome, Moriya-cho, Kanagawa-ku, Yokohama-city, Kanagawa-prefecture, 221-8528, Japan

(No.YA085C)



Printed in Japan
VPT